

SPONGES.

**R. CRESSWELL
& CO.**



**ESTABLISHED
1850.**

PLEASE TAKE NOTE—

That—We hold every description of Sponge, and the largest and best assorted stock in the world.

That—We have imported and sold the finest Cuban Sponges for 36 years, and that *no firm extant has any monopoly whatever*, the right of Sponge fishing in Cuban waters being easily obtained by payment of a small fee to the Government.

That—Our Trade Mark, Prices Current, and Form of advertisement are being unscrupulously followed, thereby misleading our regular customers both at home and abroad.

To this your particular attention is requested.

That—Our long-standing and exceptional position on the Fisheries, and the enormous stock we hold of every description of Sponge, enable us to furnish, as everywhere acknowledged, THE VERY BEST VALUE in executing all orders entrusted to us, and, at the same time, with the greatest dispatch and accuracy.

That—We shall be happy to supply our Complete Price List to any inquirer on application.

That—Our Name and Address remain unchanged, and are

R. CRESSWELL & CO.,

32 RED LION SQUARE, LONDON, W.C.,

which please note specially so as to avoid confusion and prejudice to customers' interests.

For full particulars see Illustrated Price List on following pages.

ESTABLISHED 1850.

Telegraphic Address—"CRESSWELL LONDON."

See four following pages

ESTABLISHED 1850.

SPONGES.



R. CRESSWELL & CO., SPONGE IMPORTERS & MERCHANTS,

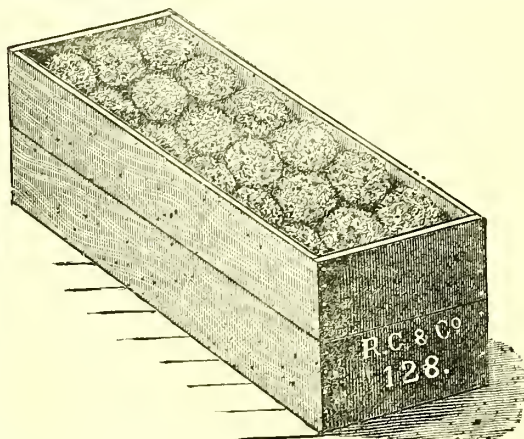
32 RED LION SQUARE, LONDON, W.C.;

And at PIRÆUS and SMYRNA.

ESTABLISHED 1850.

Telegraphic Address: "CRESSWELL LONDON."

Sponges adapted specially for Druggists, Perfumers, Saddlers, Brush-makers, Drapers, Fancy Warehouses, &c., will be found fully described in the following Price List—by the Case, Piece or Weight, Sandless or in Sand; on Strings Cards, and in Blue Card Boxes.



Sponges in Cases.

SANDED OR SANDLESS.

HONEY-COMB SPONGES.

No.	Qty.		Pieces in case, about	Price case.
1	1st	Finest selected shapes, assorted sizes	120	240/
2	1st	Do. do. do.	75	140/
3	1st	Do. do. do.	45	80/
4	1st	Small selected shapes	280	140/
5	1st	Superior do. large Bath sizes	25	140/
6	2nd	Do. quality shapes, assorted sizes	125	160/
7	2nd	Do. do. do.	73	84/
8	2nd	Good quality shapes, small	280	70/
9	2nd	Do. large Bath sizes	25	100/
10	3rd	Do. assorted sizes	145	105/
11	3rd	Do. do.	85	70/
12	3rd	Do. large Bath sizes	25	60/
13	4th	For Stable use, &c.	100	50/

ESTABLISHED 1850.

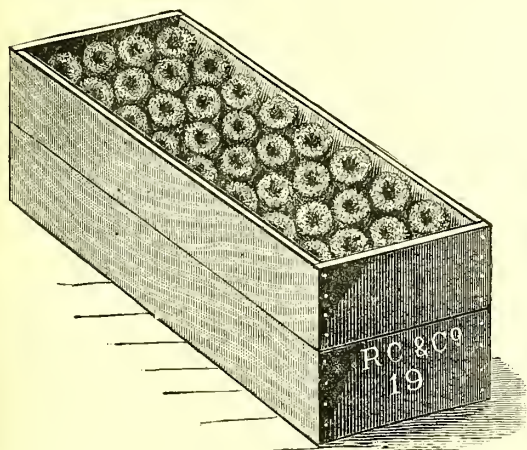
R. CRESSWELL & Co.,

Sponges in Cases.

SANDED OR SANDLESS.

FINE TURKEY SPONGES.

No.	Qty.		Pieces in case about	Price case.
14	1st	Finest selected Cups, assorted sizes	... 110	360/
15	1st	Do. do.	... 60	200/
16	1st	Do. Bath sizes	... 25	240/
17	2nd	Superior Cups, assorted sizes	... 110	240/
18	2nd	Do. do.	... 60	140/
19	2nd	Do. Bath sizes	... 35	180/
20	3rd	Fine Cups, assorted sizes	... 110	180/
21	3rd	Do. do.	... 65	105/
22	3rd	Do. Bath sizes	... 35	140/
23	1st	Turkey Solids, assorted sizes	... 100	140/
24	2nd	Do. do.	... 100	110/
25	1st	Flat Saddle, assorted sizes	... 50	190/
26	1st	Do. do.	... 30	120/
27	2nd	Do. do.	... 50	130/
28	2nd	Do. do.	... 30	80/



BROWN TURKEY SPONGES.

No.	Qty.		Pieces in case.	Price case.
29	1st	Finest selected, assorted sizes	... 130	90/
30	1st	Do. do.	... 70	55/
31	2nd	Superior quality do.	... 130	63/
32	2nd	Do. do.	... 70	40/
?	3rd	Slate quality do.	... 300	25/

FINE EGYPTIAN SPONGES.

A very good-looking and cheap kind of Fine Toilet Sponge; very durable, and soft when wetted.

No.	Qty.		Pieces in case.	Price case.
34	1st	Finest selected, assorted sizes	... 110	100/
35	1st	Do. do.	... 210	70/
36	2nd	Good quality do.	... 110	80/
37	2nd	Do. do.	... 210	55/

Florida Sponges on Strings.

	Pieces.	Per string.		Pieces.	Per string.
A Finest Wool, Bath sizes	... 12	30/	J Finest Velvet, Bath sizes	... 12	25/
B Do. do.	... 12	24/	K Do. do.	... 12	20/
C Do. do.	... 12	20/	L Do. medium sizes	... 15	18/
D Do. medium sizes	... 15	22/	M Do. do.	... 15	16/
E Do. do.	... 15	15/	N Do. do.	... 15	12/
F Do. do.	... 15	10/	O Do. do.	... 15	9/
H Do. medium small	... 15	7/6	P Do. medium small	... 15	7/
I Do. do.	... 15	5/	Q Do. do.	... 15	4/6

Florida Sponges in Cases.

	Pieces.	Price case.		Pieces.	Price case.
FA Finest Toilet and Bath	... 150	75/	FD Finest Toilet and Bath	... 100	150/
FB Do. do.	... 100	75/	FE Do. do.	... 100	200/
FC Do. do.	... 100	100/			

West Indian Sponges (Raw) in Bales.

We hold the largest stock in Europe of these goods, and can quote exceptionally low prices.

Finest Wool	... ..	from 4/6 to 7/
Finest Velvet	... ..	" 4/ to 6/6
Finest Yellow	... ..	" 1/6 to 2/6
Finest Grass	... ..	" 1/6 to 2/6
Finest Fine Reef...	... ..	" 3/ to 6/
Finest Hardhead ...	... ..	" 2/ to 5/
Finest Glove	... ..	" 1/ to 2/6

** Commoner qualities at all prices.

ESTABLISHED 1850.

32 RED LION SQUARE, LONDON, W.C.

Sponges on Strings.

The Strings of Sponges, for which we quote below, are put in a form which will facilitate the trade of wholesale and general buyers considerably. They are compact, of excellent value, and well adapted for display.

HONEY-COMB SPONGES ON STRINGS.

No.		On each string.								Per string.
1	Best Toilet Honey-comb, 1st quality,	18 pieces...	...	...	...	...	...	...	...	12/
2	" " "	" 18	"	...	...	...	...	...	...	18/
3	" " "	" 18	"	...	...	...	...	...	...	24/
4	" " "	" 18	"	...	...	...	...	...	...	30/
5	" " "	" 12	"	...	...	...	...	...	...	27/
6	" Bath	" 12	"	...	...	...	...	...	...	36/
7	" " "	" 12	"	...	...	...	...	...	...	48/
8	" " "	" 12	"	...	...	...	...	...	...	60/
9	" " large	" 6	"	...	...	...	...	...	...	36/
10	" " "	" 6	"	...	...	...	...	...	...	48/
11	Good Toilet	2nd quality, 18	"	...	...	...	...	...	...	9/
12	" " "	" 18	"	...	...	...	...	...	...	12/
13	" " "	" 18	"	...	...	...	...	...	...	18/
14	" Bath	" 12	"	...	...	...	...	...	...	27/
15	" " "	" 12	"	...	...	...	...	...	...	36/
16	" " "	" 12	"	...	...	...	...	...	...	48/
17	Good General	3rd quality, 18	"	...	...	...	...	...	...	16/
18	" " "	" 18	"	...	...	...	...	...	...	12/
19	" " "	" 18	"	...	...	...	...	...	...	14/
20	" " "	" 12	"	...	...	...	...	...	...	18/
21	" " "	" 12	"	...	...	...	...	...	...	24/
22	" " "	" 12	"	...	...	...	...	...	...	30/

FINE TURKEY SPONGES ON STRINGS.

No.	Qty.		On each string.	Per string.	No.	Qty.		On each string.	Per string.
23	1st	Superior Fine Turkey Cups	...	12 18/	37	1st	Sup. Small Fine Trky. Cups, 3 rnds.,	25 18/	
24	1st	" " "	...	12 24/	38	1st	" " "	" 25 24/	
25	1st	" " "	...	12 36/	39	1st	" " "	" 25 30/	
26	1st	" " "	...	12 48/	40	2nd	Good " "	" 25 15/	
27	1st	" " "	...	12 60/	41	2nd	" " "	" 25 20/	
28	1st	" " "	...	12 72/	42	2nd	" " "	" 25 25/	
29	1st	" " "	...	12 84/	43	Good	Fine Turkey Solids	...	25 9/
30	2nd	Good	"	12 15/	44	"	" " "	...	25 12/
31	2nd	" " "	...	12 20/	45	"	" " "	...	25 18/
32	2nd	" " "	...	12 30/	46	"	" " "	...	25 25/
33	2nd	" " "	...	12 40/	47	"	" " "	...	25 33/
34	2nd	" " "	...	12 50/	48	"	" " "	...	25 39/
35	2nd	" " "	...	12 60/	49	"	" " "	...	25 48/
36	2nd	" " "	...	12 72/					

FINE EGYPTIAN SPONGES ON SIRINGS.

No.									Per string.
50	Best Egyptian,	20 pieces on each string	...	...	...	...	...	...	6/
51	" " "	20 " "	...	...	...	...	...	...	9/
52	" " "	20 " "	...	...	...	...	...	...	14/
53	" " small	35 " "	...	...	...	...	...	...	6/

R. CRESSWELL & Co., 32 Red Lion Square, London, W.C.



Sponges on Cards.

Sponges on Cards, as quoted below, have now a very large sale. Buyers are cautioned against inferior imitations of our goods. The Cards bearing our Trade Mark will be found vastly superior to all others in the following particulars, viz. value, appearance, and regularity of assortment.

The Cards can be supplied without prices on, for Export.



		Per doz. Cards.
Superior 1d. Honey-comb	School, 1 doz. on card	7/
" 2d.	Toilet " " "	14/
" 3d.	" " " "	21/
" 4d.	" " " "	27/6
" 6d.	" " " "	21/
" 1s.	" " " "	42/
" 1s. 6d.	" " " "	63/
" 2s.	" " " "	84/
" 2s. 6d.	" " " "	105/
" 3s.	" " " "	84/
" 3s. 6d.	" " " "	100/
" 4s.	" " " "	112/
" 5s.	" " " "	105/
" 7s. 6d.	" " " "	157/6
" 10s.	" " " "	210/

		Per doz. Cards
Superior 1d. Turkey	School, 1 doz. on card	7/
" 2d.	Toilet " " "	14/
" 3d.	" " " "	21/
" 4d.	" " " "	27/6
" 6d.	" " " "	42/
" 1s.	" " " "	84/
" 1s. 6d.	" " " "	63/
" 2s.	" " " "	84/
" 2s. 6d.	" " " "	105/
" 3s.	" " " "	84/
" 3s. 6d.	" " " "	100/
" 4s.	" " " "	112/
" 5s.	" " " "	136/
" 7s. 6d.	" " " "	212/
" 10s.	" " " "	272/
" 3d. Egyptian Toilet,	1 doz. on card	21/
" 4d.	" " " "	27/6
" 6d.	" " " "	42/
" 1s.	" " " "	84/
" 1s. 6d.	" " " "	63/
" 2s.	" " " "	84/
" 2s. 6d.	" " " "	105/

6d. Sanitary Turkey on bone handles, 1 doz. on card 42/

* * Special Discount off Carded Goods for large quantities.

Sandless Sponges (by Weight).

READY FOR USE.

HONEY-COMB SPONGES.

ASSORTED SIZES.

No.	Pieces to the lb.	Price per lb.
1	Finest selected Toilet and Bath shapes, of superior texture ... about 25	35/
	Special Bath shapes and sizes ... 7 to 12	32/ & 35/
2	Best Toilet shapes, fine and strong texture ... about 25	25/
	Special Bath shapes and sizes ... 7 to 12	28/
3	Ordinary Bath shapes, good and fine texture ... about 18	17/
4	Good large Cuts, for Carriage, Household, and Stable use ... 16	14/
4A	Superior Cuts for Bath & Toilet use ... 16	18/
5	Medium sizes for general cleaning purposes ... 40	12/
6	Sup. sml. shapes for Nursery use, &c. ... 72	13/

TRADE MARK.



May be had in handsome Blue Enamelled Cardboard Boxes of—

½ dozen at 4/ 5/ 6/ 7/ 8/ per box.

1 " 5/ 6/ 7/ 6/ 9/ 10/ 6/ 12/ 15/ 18/ per box.

Superior large Bath shape, in boxes containing 1 sponge at 4/ 4/ 6/ 5/ 5/ 6/ 6/ 7/ 8/ 9/ 10/ each.

FINE TURKEY SPONGES.

ASSORTED SIZES.

No. Qty.	Pieces to the lb.	Price per lb.
1	Finest selected shapes and quality, about 50 120/ to 200/	
2	First quality, superior texture, good shapes ... 45 80/ " 100/	
3	Second quality, ordinary shapes, fine texture ... 40 60/ " 80/	
4	Ordinary quality and shapes ... 60 40/ " 60/	
5	First quality, Flat saddle ... 10 to 15	40/
6	Second quality, Flat saddle ... 12 " 18	30/
7	First quality, fine Turkey Solids, about 45	50/
8	Second quality do. ... 60	40/
9	Fine Turkey pieces, good quality, 100 to 120	30/

May be had in handsome Blue Enamelled Cardboard Boxes for the facility of buyers.

Boxes containing 1 dozen, at 4/ 6/ 8/ 10/ 12/ 18/ per box.

" ½ " 12/ 15/ 18/ 21/ 24/ per box.

And upwards to 120/ per box of half-a-dozen.

TERMS: 2½ PER CENT. DISCOUNT, 3 MONTHS NETT.

See previous pages.

ESTABLISHED 1850.

ACCURATE STANDARD SOLUTIONS, INSTRUMENTS, AND
CHEMICALS FOR VOLUMETRIC ANALYSIS.



FRANCIS SUTTON & CO., NORWICH,

Supply first quality Wholesale and Retail Solutions and Apparatus for Analysis of Waters, Beers, Worts, Sugars, Urine, Metals, Alkalies, Acids, Phosphates, Manures, Medicines, &c.

SPECIALITIES—Sensitive Nessler Test, Bright Clark's Soap Test, Fehling's Copper, Uranium, Silver, Mercury, Permanganate, Indigotine, all the New Indicators, Methyl Orange, Phenacetolol, Phenolphthalein, Laemoid, Corallin, Special Litmus, &c.

Price List mailed to any address.

Foreign Orders executed with prompt dispatch.

GOVERNMENT DISINFECTANT

CARBOLIC POWDER (PINK) in 1 Cwt. 2 Cwt. CASKS 1lb & 1/2 Packages

CARBOLIC POWDER (PINK) in TINS 6d & 1/6 CARBOLIC SOAP N° 1 & N° 2

CARBOLIC FLUID in 6d 1/6 & 1/6 STOPPED BOTTLES CARBOLIC & GLYCERINE SOAP in 1/4 lb. TABS

FREE FROM POISON TO BE HAD FROM ALL WHOLESALE DRUGGISTS.

THE GOVERNMENT SANITARY CO., LONDON E.

Introduced 1858.

ROBINSON'S CONCENTRATED WATERS.

[Introduced 1855.]

One Ounce of these Waters added to Forty Ounces of Distilled Water forms a clear Medicated Water (without filtering), similar in every respect to those prepared according to the directions of the British Pharmacopoeia, and free from all Chemical impurity. They will keep good any length of time in any climate.



Aqua Anethi, Concent., 4/ lb.	Aqua Cinnam. Ver. Concent., 6/ lb.	Aqua Foeniculi, Concent., 4/ lb.	Aqua Pimentæ, Concent., 4/ lb.
" Anisi " 4/ "	" Cassia " 8/ "	" Menth. Pip. " 6/ "	" Rose " 8/6 "
" Camphoræ " 4/ "	" Flor. Aurant. " 8/6 "	" Ang. " 6/ "	" Rosæ Virgin. " 10/6 "
" Carui " 4/ "	" Flor. Sambuci " 8/6 "	" Virid. " 4/ "	

The above are put up in Bottles of 1 lb. or 1 lb. and upwards, each of which has the Inventor's Protection Label over Cork.

From the LANCET, July 15, 1882:—"CONCENTRATED WATERS (Robinson's, Pendleton, Manchester).—Among the samples sent to us we find Aq. Anethi, Anisi, Cinnam. Ver., Rosæ, and some dozen of others. Diluted with forty parts of water they form the ordinary waters of the Pharmacopoeia. They are excellent in quality, and will be very useful, especially in country practice."

Wholesale Agents: HEARON & CO., London, and most Provincial Wholesale Druggists. PREPARED BY THE INVENTOR, B. ROBINSON, MANUFACTURING CHEMIST, DISTILLER, AND BREWER OF BRITISH WINES, MANCHESTER.

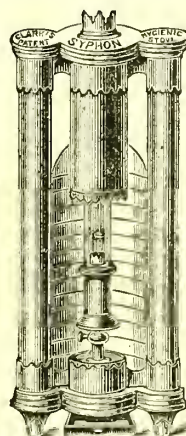
AGENTS WANTED

A.W. POLLARD.
MANUFACTURER OF IMPROVED
RUBBER STAMPS
BEST MAKE & FINISH

PEN & PENCIL
WITH RUBBER STAMP PRICE 2/6 COMPLETE
NEW PATTERN BOOK 36 PAGES NOW READY.
MOST LIBERAL TERMS TO THE TRADE
PATTERN SHEETS FREE ON APPLICATION

30 - 32
LUDGATE HILL
LONDON E.C.

AGENTS WANTED.



THE "SYPHON" (REGISTERED TITLE) (CLARK'S PATENT) GAS HEATING STOVES. NO FLUE REQUIRED.

No smoke. No smell. No dirt or trouble. No danger. All sulphurous vapours are condensed inside the Stoves, and passed off as a liquid into tray beneath. The ONLY SAFE ones for use in Hospitals, Sick Chambers, Greenhouses, Bedrooms, Halls, Shops, Offices, Churches, Schools, &c. BEWARE OF IMITATIONS.

Price Lists and Terms on application to

S. CLARK & CO., Patentees
(Late Hygienic Heating & Lighting Co.),
Park Street Works, Islington,
LONDON, N.

Agents: MAW, SON & THOMPSON, Aldersgate Street, London, E.C.

FOULKES' TOILET & NURSERY POWDER.

IMPALPABLE AND DELICATELY PERFUMED.

This unique Powder possesses the emollient properties of fullers' earth, free from colour, and in a high condition of purity. Unlike Starch, which in various guises forms the "Violet Powder" of commerce, this preparation absorbs without caking, and remains unchanged by both heat and moisture; therefore, to the tender skin of Infants it is peculiarly beneficial and perfectly innocuous. By its use all abrasion or chafing is prevented, and the action of any acid humour or secretion at once neutralised.

Dr. ALEX. MILNE, Edinburgh, in his recent book entitled: "The Child, and how to Nurse it," says of this favourite powder, "WE RECOMMEND IT IN PREFERENCE TO ALL OTHERS."

SOLD IN BOXES at 6d. and 1s.

Wholesale at the Patent Medicine Houses and Druggists' Sundriesmen, or from

W. J. FOULKES, Pharmaceutical Chemist, BIRKENHEAD.



Employers requiring Assistants should refer to THE SPECIAL
EXTRA SUPPLEMENT, printed on Coloured Paper, and
inserted in this number.

FOSSILINE

(PARAFFINUM MOLLE).

We beg to direct special attention to **FOSSILINE**, of which we are the Sole Manufacturers, and which we can supply in any quantity. It is one of the cheapest **HYDRO-CARBON JELLIES** in the market, and equal in quality to any. We have latterly perfected the quality, the **CONSISTENCE** and **TEXTURE** being **MUCH IMPROVED**.

It answers all the Tests for Paraffinum Molle, B.Ph. (1885).

It is put up in Tins of 1 lb., 7 lb., 14 lb., and 28 lb., Tins Free. **YELLOW**, 8d. per lb., to account; **WHITE**, 1s. 4d. per lb., to account. 56 lb. and 112 lb. Drums, 1d. per lb. less; Drums free.

SPECIAL QUOTATIONS TO BUYERS IN LARGE LOTS.

SOLE MANUFACTURERS—

EVANS, SONS & CO., LIVERPOOL.

LONDON:

CANADA:

EVANS, LESCHER & WEBB,
60 Bartholomew Close.

EVANS, SONS & MASON (LIMITED),
Montreal, Toronto, and Victoria, British Columbia.

TRADE MARK

STYPIUM

REGISTERED.

ANTISEPTIC DRESSING,

One of the most Reliable Antiseptic Agents for application to Wounds, recent or otherwise, in the Market.

FOR FOUL DISCHARGING SORES, CANCEROUS ULCERS, PILES, FISTULA, &c.
Made up in $\frac{1}{2}$ -lb. and 1-lb. Cases.

STEPHENSON & TRAVIS, 12 HOPWOOD STREET, LIVERPOOL.

NEW YORK—Theo. Rick Secker, 148 William Street; MONTREAL—M. McKenzie & Co., 6 Grey Nun Street.

PAPAIN FINKLER. THE NEW DIGESTIVE FERMENT.

USES.—**INTERNALLY:** In Dyspepsia and Gastralgia. Geo. Herschel, M.D. Lond., writes in the *British Medical Journal*, April 3rd, 1886:—"I find it chiefly valuable in (1) the Chronic Stomach Catarrhs of Children, (2) Acid Dyspepsia, and (3) Severe Gastric Pain coming on shortly after eating."

EXTERNALLY: It has been used by Bouchut in *cutaneous carcinoma*, Rossbach for dissolving the false membranes of *Diphtheria* (see *Zeit.-sch. für Klin. Med.*, vi. H. 6), by Jacoby of New York for the same purpose, and recently Prof. Finkler himself has restored patency to an oesophagus occluded by *carcinoma* by the continuous administration of a solution.

Manufactured by **Dr. FINKLER & CO., Godramstein (Palatinate).**

SOLE AGENT for the United Kingdom and Export—

B. KÜHN, 36 St. Mary-at-Hill, LONDON; & 55 Bloom Street, MANCHESTER.

SUPPLIED BY ALL WHOLESALE DRUGGISTS.

Specify "FINKLER" in your prescription, as other makes of Papain have different effects.

PERKEN, SON & RAYMENT

(LEJEUNE & PERKEN),

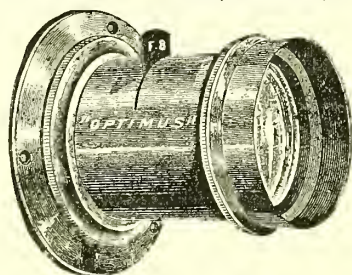
ESTABLISHED 1852,

Manufacture

Catalogue Free.

SPECTACLES.—SPHERICAL, CYLINDRICAL, SPHERO-CYLINDRICAL.
MICROSCOPES, TELESCOPES, THEODOLITES,
SEXTANTS.—MATHEMATICAL INSTRUMENTS.
ELECTRIC APPARATUS.—MEDICAL AND OTHERWISE.
BAROMETERS.—MERCURIAL AND ANEROID.
OPERA, FIELD, AND MARINE GLASSES.
SPECIFIC GRAVITY INSTRUMENTS.
THERMOMETERS.—CLINICAL, CHEMICAL, AIR, &c., &c.

MAGIC LANTERNS OF ALL SIZES, AND SLIDES.
PHOTOGRAPHIC CAMERAS, LENSES, &c., &c.



Hatton Garden, London, E.C.

JAMES TOWNSEND, Medical Label Printer, EXETER.

TOWNSEND'S 1887 ALMANACKS

The UNIVERSAL.
The BOUQUET. The PURSE.

Before ordering your Almanack
send for Samples and
compare.

Crown 8vo. 74 X 42. 5,000 6/9 10,000 11/6	LITHO. 1,000 9/6 3,000 18/- 5,000 25/-
Chemists' Handbills. Demy 8vo. 84 X 54. 5,000 11/6 10,000 18/-	Chemists' Memorandums TYPE. 1,000 6/-, 5,000 20/-

JAMES TOWNSEND, Medical Label Printer, EXETER.

THE WHOLESALE AND RETAIL Druggists' Price Book.

By D. ELLIOTT.

NEW EDITION, revised according to the British
Pharmacopœia, 1885

Pocket Size. Bound in Leather. Price 3s., Post Free 3s. 2d.

NOW READY

FOR

1887,

GLAISYER & KEMP'S
PRICE BOOK
OF DRUGS, CHEMICALS, & PHARMACEUTICAL
PREPARATIONS, & SUNDRIES.

Revised according to the British Pharmacopœia, 1885.
Contents—183 printed and 9 blank pages, ruled throughout
for lb., oz., dr., &c. Sundries ruled per doz., gross, &c.
Post 4to, Strongly Bound, Half-calf, 10/6.

SILVERLOCK'S SACHET, PRESENTATION, AND CARD → ALMANACKS. ←

CHEMISTS' COUNTER BILLS, good quality,	7½ by 5	10,000, 15/
Do. do. do. do.	9 by 5½	10,000, 22/6
Do. do. do. second quality,	7½ by 5	10,000, 12/6
Do. do. do. do.	9 by 5½	10,000, 18/

CHEMISTS' SLIP LABELS from 1/ per 1000; a reduction on large quantities.
CHEMISTS' PILL LABELS from 1/3 per 1000; " "

SAMPLES FREE BY RETURN OF POST.

Labels of every description, Price Lists, Illustrated Trade Catalogues, Prospectuses, Pamphlets, Show Cards, &c.

JOHN BELL & CO.'S PRICE BOOK

OF
DRUGS, CHEMICALS, AND PHARMACEUTICAL
PREPARATIONS.

Contents—132 printed and 16 blank pages, ruled throughout
for cwt., lb., oz., dr.; or lb., oz., dr., gr.
Post 4to, Strongly Bound, Half-calf, 10/6.

H. SILVERLOCK,
Medical Label & General
Printer,
92, BLACKFRIARS ROAD,
LONDON. S.E.

THE
LIVERPOOL & MANCHESTER
Chemists' Price Lists.

1s. each.
Post Free 1s. 1d. each.

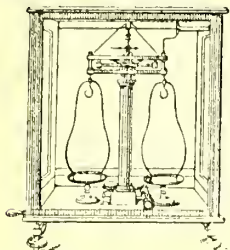
THE LIVERPOOL SCHOOL OF PHARMACY, 36 OXFORD STREET, LIVERPOOL.

Principal—J. S. WARD, M.P.S., Ph. Ch. (Prize Medallist and South Kensington Prizeman).
Assisted by Messrs. J. T. HORNBLLOWER and H. WYATT for the Minor pupils, and Mr. PENDLEBURY for the Preliminary pupils

The curriculum of this School is approved of and recommended by the Council of the Liverpool Chemists' Association.
PROSPECTUS, WITH TERMS, ETC., SENT FREE ON APPLICATION.

ESTABLISHED 1875.

OTTO WOLTERS, MANUFACTURER OF ANALYTICAL, VACUUM, & BULLION BALANCES



ALSO
Automatic Assorting Machines
FOR MINTS AND BANKERS.

WOLTERS' IMPROVED SHORT-
BEAMED ANALYTICAL BALANCE,
A SPECIALITY.

A Description, explaining the principles of
these Balances, post free on application.
Assay and other Weights of every description,
made to order, Balances for Exportation.

55 UP. MARYLEBONE ST., Portland Place, LONDON, W.

THE LONDON HOMŒOPATHIC HOSPITAL AND MEDICAL SCHOOL, GREAT ORMOND STREET.

A NEW WARD, unoccupied for want of funds, is much needed for Ma's Patients, and will be opened so soon as sufficient funds to support it are received. The Hospital now contains eighty beds. Trained Nurses are sent out at moderate fees for Medical, Surgical, or Accouchement cases, the latter specially Certificated.

G. A. CROSS, Secretary

THE MANCHESTER COLLEGE OF PHARMACY,

225 & 227a OXFORD STREET, MANCHESTER.

DIRECTOR:—MR. W. SPENCER TURNER.

The next Session will begin on January 3, 1887, and will include the usual Courses of Classes for Minor, Major, and Preliminary.

The Minor Classes are:—**Full Time**—Doing four hours' Class and two hours' Practical every day. **Afternoon**—Doing four hours' Class and two hours' Practical every week (Tuesdays and Thursdays, at 4 P.M.). **Once a Week**—Doing four hours' Class on Tuesday afternoons. **Evening**—Doing the same work on Mondays, Wednesdays, and Fridays, at 8 P.M.

Full particulars are given in the Copyright Circular, which will be sent to any address on application.

Price 2s. 6d., post free.

500 PRACTICAL TRADE RECEIPTS FOR CHEMISTS AND DRUGGISTS.

4th Edition (nearly 700 Receipts). Contains approximate formulæ of several popular Proprietary Articles, formulæ which have been devised and published in American, English, French, German, Russian, and other pharmaceutical periodicals since the last editions of more expensive works, and many private receipts of proved value which have never before been published.

GEO. H. ROBINSON, New Book Court, Crystal Palace, S.E.

CHEMICAL AND SCIENTIFIC APPARATUS.

J. ORME & CO.

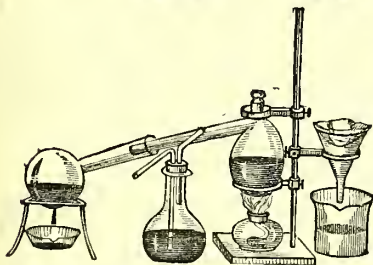
(Late M. JACKSON & CO.),

Manufacturers and Importers of every description
of Apparatus for Lecturers or Laboratory use.

By Appointment to H.M. Hon. Board of Inland Revenue, Science and
Art Department, Royal School of Mines, Trinity House,
Pharmaceutical Society, &c.

ILLUSTRATED PRICE LISTS ON APPLICATION.

65 BARBICAN, LONDON E.C.



ALMANACKS FOR 1887.

NEW AND ARTISTIC DESIGNS.

FORD. SHAPLAND & CO.,

MEDICAL LABEL & GENERAL PRINTERS, &c., 6 GREAT TURNSTILE, LONDON, W.C.

Will be pleased to forward Specimens and Prices on application, post free.

CHEMISTS' COUNTER BILLS, on Good Paper, at Lowest Prices ever offered.

10,000 CROWN 8vo. BILLS (7½ in. × 5 in.), 12s. 6d.

10,000 DEMY 8vo. BILLS (9 in. × 5½ in.), 18s.

ALL OTHER SIZES AT EQUALLY LOW RATES. SAMPLES AND PRICES ON APPLICATION.
LABELS of every description SLIP LABELS, 10,000 (10 kinds), 1s. per 1,000. PRICE LISTS, Pamphlets, Circulars, Billheads, Memorandums, Cards, and all kinds of Printing and Stationery required by Chemists at most Moderate Prices. STOCK SHOW CARDS, Gold on Black. Gift Bevelled Edges, size 10 in. × 6 in. for various specialties; Samples 9d. each, post free. SOLE AGENTS for CHARLES RICHARDS' PATENT PERFECT TUBE CLEANER FOR INFANTS' BOTTLE TUBES, 6s. 6d. per gross; Carded, 8s. per gross.

AGENTS FOR REGISTRATION OF TRADE MARKS.

DESIGNS FURNISHED IF REQUIRED.

Hunyadi János

CAUTION.—Circumstances which have come to the knowledge of Andreas Saxlehner, Buda Pest, Sole Proprietor of the Hunyadi János Spring, compel him to warn the British Public against SPURIOUS IMITATIONS. To secure genuineness, purchasers should see that every bottle has on the LABEL the name of "THE APOLLINARIS COMPANY (LIMITED), London."

JEWSBURY & BROWN'S (MANCHESTER) SPARKLING TABLE WATERS, UNRIVALLED FOR PURITY AND QUALITY.

SODA WATER.
SELTZER WATER.
POTASH WATER.
LITHIA WATER.
SIMPLE
AERATED WATER.



LEMONADE.
GINGER ALE.
QUININE TONIC.
GINGER BEER.
HOREHOUND BEER.

EXTRACTS FROM ANALYTICAL REPORTS.

"The examination of the Waters which I have made has satisfied me that they have been prepared with the greatest care, and are of excellent quality."
FRANCIS JONES, F.R.S.E., F.C.S.
"On the whole, I have no hesitation in stating that your Aerated Waters are of the highest standard of purity which is practically attainable."
LOUIS SIEBOLD, F.I.C., F.C.S.

"The Lemonade is, for flavour and general excellence, superior to any similar compound which I have examined, and contains no acid but Citric Acid."
"I took a sample of the water used in your manufactory, in the preparation of the Aerated Waters, and found it, as was the case with the completed compounds entirely free from lead, copper, or any injurious matter whatever."
C. ESTOVERT, F.C.S., F.C.I.

J. & B.'s Syphons are mounted with PURE BLOCK TIN, thus ensuring absolute immunity from dangerous metallic contamination

113 MARKET STREET, and 44 DOWNING STREET, MANCHESTER.

ROBERT GIBSON, MEDICATED LOZENGE

MANUFACTURER.

Carlton Works, Erskine Street, Hulme, MANCHESTER, and 1 Australian Avenue, LONDON, E.C.

EXPORTER OF

LOZENGES, BOILED SUGARS, & JUJUBES TO ALL PARTS OF THE WORLD.

SEE PAGE ADVERTISEMENT, JANUARY 15, 1885, No. 110.

SOLE AGENTS FOR UNITED STATES—WRIGHT & RICH, NEW YORK.

J. DUNLOP MITCHELL & CO.,

Office and Show Rooms: 130 to 136 INGRAM STREET, GLASGOW.

THE BEST & HANDSOMEST WATER FILTERS EVER MADE.

No one should drink unfiltered water. It is an acknowledged fact that nearly all our illnesses originate by drinking impure water. No house or establishment should be without one or more of our new "Mountain Dew" or "Rippling Rill" (Registered) Water Filters, entirely made of glass, in 1 and 2 gallons capacity.

FEEDING BOTTLES—Tinted, 24/ per gross; White Glass, 26/6.

BOTTLES of every description of shape and size, panelled and plain, stoppered and not, also with and without white metal screw tops, at lowest prices. Show and specimen Bottles, Glasses, and Jars in great variety; also Laboratory Glassware. Show and Stock Bottles and Barrels, after the style of Illustrations, in White Glass $\frac{1}{2}$, 1, 2, 3, and 4 gallons capacity, fitted with glass stoppers and silvered taps.

Perfect Security by Post and Rail. Corrugated paper-lined Boxes made any size, and fitted for one or more bottles. Also Wooden Post Boxes.

SPECIALTIES.

Illustrations, Samples, and Prices on application.

Correspondence solicited.

AGENTS WANTED in the Colonies and Abroad.



HAY'S HOP ALE ESSENCE.

TRADE MARK

THIS ESSENCE

Is made from
the choicest HOPS
grown, and is
unrivalled for its
peculiarly fine HOP
flavour and Aroma.



"HOP ALE

"Made from this
"Essence is a nearer
"approach to BASS
"or ALLSOPP'S ALE
"than any non-in-
"toxicants preceded-
"ing it."

EASTERN MORNING NEWS

HOP ALE

Made from this Essence has the full flavour of the Finest Hops, and is a really Appetising Bitter Beer.

Trade Price, 8s. 6d. per lb.; 12 lbs. and upwards, 8s.

Quantity required, two fluid oz. to each gallon of Syrup, making 106 10-oz. Bottles.

W. HAY, Manufacturing Chemist, Beverley Road, **HULL,**
ENGLAND.

BY ROYAL LETTERS PATENT.

HASSALL & Co.'s PHOSPHO-CITRIC ACID

To Supersede Citric & Tartaric for Aerated Waters. It is recommended by the most eminent Physicians in Great Britain.

THE BEST HOUSES IN THE TRADE HAVE ALREADY ADOPTED IT.

It is thoroughly beneficial, and far better suited to the requirements of the Mineral Water Trade; it is free from lead and all other minerals and cheap acids; it is fully £8 per cwt. cheaper than Citric Acid, which mostly contains lead.

WE COMPETE ON QUALITY AND PRICE.

Testimonial from Mr. A. J. MASON, Chemist, of Bexley Heath.

"Having gone carefully into the matter I have no hesitation in saying that the patentees have in no way overstated the merits of their acid. There is no doubt in my mind that Phospho-citric Acid produces a much higher class beverage-giving, as they say, 'greater body'—the one thing needful in this class of goods; also a fruity character and mellowness I have never been able to secure with the ordinary acids. The aroma is also more pronounced. 'Purity' was my great incentive in giving the acid a trial, but I found 50s. or 60s. (citric at 1s. 7d. per lb.) per cwt. an economy not often secured under such favourable circumstances."

Why pay 2/6 per lb. for Citric, when a purer and more efficient Acid can be bought at about $\frac{1}{3}$ the price?

Beware of Imitations.

Write for Pamphlet and Testimonials.

3-oz. Sample will be sent on receipt of Postage (3 Stamps), or 14 lbs. on approbation.

HASSALL & CO., Great Northern Goods Depot, King's Cross, **LONDON.**

Reuter's Cables and Inland Telegrams—"REMPUJARON LONDON."

NEW YORK—F. J. MACNAUGHTON, 20 CEDAR STREET.

143, MINORIES LONDON E.C.
New York
Sydney

BOXES BOTTLES. MACHINERY.
ESSENCES
Catalogues, Circulars, Testimonials
Post Free

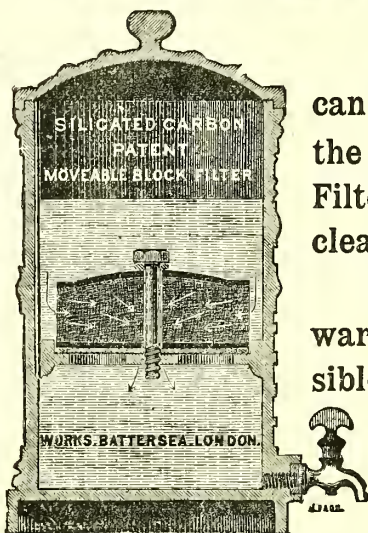
SODA WATER MACHINERY
AND ALL ACCESSORIES
FOR THE TRADE

BRATBY & HINCHLIFFE
HEAD OFFICE
SANDFORD ST. ANCOATS, MANCHESTER.

QUEEN
MANCHESTER

SILICATED CARBON PATENT MOVABLE BLOCK FILTERS.

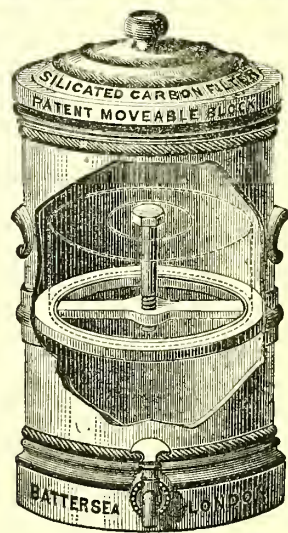
LIBERAL DISCOUNT TO THE TRADE.



The Silicated Carbon Block can be instantly removed, leaving the whole of the interior of the Filter OPEN for inspection and cleansing.

The working parts are stone-ware, and no corrosion is possible.

No loose Pan or inner vessel to cause breakage.



LIBERAL DISCOUNT TO THE TRADE.

(Section.)

Domestic Filters (as above), in Cream-coloured Stone-ware, with Plated Taps and Patent Movable Blocks:—

No. 27. O. $\frac{1}{2}$ gal. 10/6 each.	D. 6 gals. 42/- each.
A. 1 " 14/6 "	E. 8 " 52/- "
B. 2 " 21/- "	F. 12 " 70/- "
C. 4 " 32/- "	

Dining Room Filters, in Marbled China, with Plated Taps and Patent Movable Blocks:—

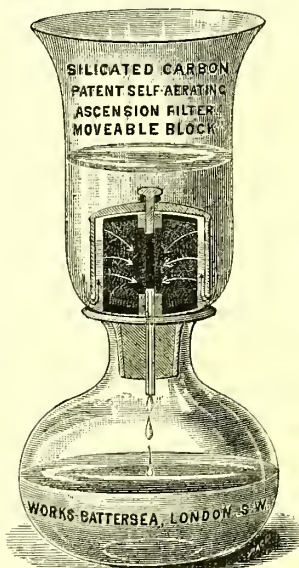
No. 22. A. 2 gals. 35/- each
B. 5 " 80/- "

Refrigerative Terra Cotta, do. do.:

No. 25. 2 gals. 31/6 "

THE NEWEST AND MOST EFFICIENT TABLE FILTER.

The water ascends in the direction indicated by the arrows, and each time the top glass is filled the air under the porcelain cover is forced through the Silicated Carbon Block, which is thus automatically aerated.



By simply removing the glass peg the Silicated Carbon Block is at once released for cleansing or renewal.

The Carbon Blocks are efficiently cleansed by boiling, and extra blocks can be supplied with each Filter when desired.

No. 38.

PLAIN GLASS.

No. O—1 Pint	2/6 each.
" A—2 "	4/- "
" B—3 "	5/6 "

No. 38.

ENGRAVED GLASS.

No. O—1 Pint	3/6 each.
" A—2 "	5/6 "
" B—3 "	7/6 "

FOR FULL ILLUSTRATED LISTS WRITE TO THE

SILICATED CARBON FILTER COMPANY,
CHURCH ROAD, BATTERSEA, LONDON, S.W.

"Selected"
OIL OF LEMON.
Genuine and of Guaranteed Purity.
This Oil is unsurpassed for aroma and strength.

Sinest
FRUIT ESSENCES.
Prepared from Selected Fruit by Special Process.

Highly Concentrated
FRUIT ESSENCES
for Flavouring purposes, and Confectionery of every description.

PURE
Harmless
VEGETABLE COLOURS
for Confectionery.
Of guaranteed purity and exceptional brilliancy.

AND ALL MATERIALS
REQUIRED BY
Brewers,
Rectifiers,
Cordial Makers,
Wine and Spirit
Merchants,
Mineral Water
Makers, &c. &c.

STEVENSON AND HOWELL.

FELLOWS OF THE CHEMICAL SOCIETY &c &c.

MANUFACTURING CHEMISTS

DISTILLERS AND IMPORTERS OF

**ESSENTIAL OILS
OF GUARANTEED PURITY**

**PURE CONCENTRATED
SOLUBLE
ESSENCES.**

FRUIT-ESSENCES

**PURE COLORINGS
OF EVERY DESCRIPTION**

**ANALYTICAL AND CONSULTING CHEMISTS
TO THE TRADE.**

"Extra Quality"
Soluble Essence of
JAMAICA GINGER.
For Aerated Beverages,
Cordials, Syrups, &c.
This Essence is
unequalled.

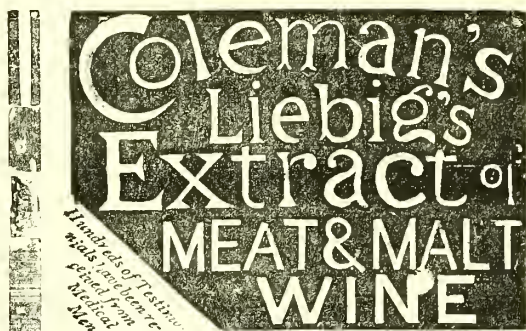
FINEST
SOLUBLE ESSENCES
OF EVERY DESCRIPTION,
for the Preparation of Perfect
Aerated Beverages,
Cordials,
Syrups,
&c.

Soluble,
Brilliant,
Permanent,
Of Guaranteed Purity.
COLOURINGS.
for Brewers, Rectifiers,
Mineral Water
and Cordial
Makers.

American
FOAM SYRUP.
For giving a close Creamy
Head to all Beverages.
One Pound is sufficient
for 150 gallons of
liquor.

AND ALL MATERIALS
REQUIRED BY
Manufacturing
Confectioners,
Wholesale
Tobacconists,
Perfumers,
Soap Makers,
Biscuit Makers, &c. &c.

**STANDARD WORKS, 95^A, SOUTHWARK ST., LONDON. S.E.
AND 128, HOPE ST., GLASGOW.**



Is a Delicious Beverage and Tonic made from Port Wine, Liebig's Extract of Meat and Extract of Malt.

**NUTRITIOUS, STRENGTHENING,
STIMULATING,**

Flesh-forming, and Health-restoring.

SUITABLE FOR THE ROBUST IN HEALTH
AS WELL AS THE INVALID.

Important Unsolicited Testimonial from
M. K. HARGREAVES, Esq., M.D.

Wellington House, Bruce Street, Leeds.

Messrs. COLEMAN & Co.

January 12, 1885.

Gentlemen,—I received sample bottle of your "Extract of Beef and Malt Wine." I find that it is the same as I used extensively over two years ago, and which I found of so much benefit that I have used it ever since in my practice, and numbers of my patients get it for themselves. I have great confidence in it as a tonic and restorative. It is also very useful in cases of consumption.

I wish you would send me one dozen bottles, and then will send you money by return. You can send it by rail by G.E.R. on to the G.N.R., and then it will come direct to Leeds.

I am, yours truly,

M. K. HARGREAVES, M.D.

Sold by all Druggists, Wine Merchants, and Patent Medicine Vendors in the United Kingdom, in Bottles, 2s. 9d. and 4s. 6d. each.

Ask for COLEMAN'S LIEBIG'S EXTRACT OF MEAT AND MALT WINE, and "see that you get it."

2/9 size, 30s. per doz. 4/6 size, 50s. per doz.

Carriage paid to any Railway Station in Great Britain.

Sample Pint Bottle sent free by Post on receipt of 33 stamps.

The following Preparations have also been introduced by the Manufacturers:—

Coleman's Liebig's Extract of Meat and Malt Wine (WITH IRON), in Bottles, 2/9 and 4/6 each.

Coleman's Liebig's Extract of Meat and Malt Wine (WITH QUININE), in Bottles, 2/9 and 4/6 each.

SOLE MANUFACTURERS—

COLEMAN & CO.,
GILDENGATE ST., NORWICH.

TRADE PRICES ON APPLICATION.

EIGHT PRIZE MEDALS AWARDED.

**GOODALL'S
HOUSEHOLD SPECIALITIES.**

Yorkshire Relish

THE MOST DELICIOUS SAUCE IN THE WORLD.

This cheap and excellent Sauce makes the plainest viands palatable, and the daintiest dishes more delicious. To Chops and Steaks, Fish, &c., it is incomparable. Sold by Grocers, Oilmen, Chemists, &c., in Bottles, 6d., 1s., and 2s. each.

CAUTION.—On each Yorkshire Relish Label is a Willow Pattern Plate and name, GOODALL, BACKHOUSE & CO. No other is genuine.

**Goodall's
Baking Powder**

THE BEST IN THE WORLD.

Makes delicious Puddings without Eggs, Pastry without Butter, and beautiful light Bread without Yeast. In 1d. Packets; 6d., 1s., 2s., and 5s. Tins.

**Goodall's
Quinine Wine**

The best, cheapest, and most agreeable tonic yet introduced. The best remedy known for Indigestion, Loss of Appetite, General Debility, &c. Restores delicate individuals to health and vigour. In Bottles, 6d., 1s., and 2s. each.

**Goodall's
Custard Powder**

For making delicious Custards without Eggs, in less time and at half the price. Unequalled for the purposes intended; will give the utmost satisfaction if the instructions given are implicitly followed. Sold in boxes 2d., 6d., and 1s. each.

**Goodall's
Blanc Mange Powder**

Is acknowledged by all to be the most convenient and economical preparation ever introduced, as, by its use, a most Rich and Delicous Blanc-mange may be produced in a few minutes at a trifling cost, and may be had of various flavours, *i.e.*, Raspberry, Strawberry, Lemon, Almond, and Vanilla. Sold in Packets, 6d. and 1s. each.

**Goodall's
Egg Powder**

Acknowledged to be the only real substitute for eggs yet discovered. Its action on Cakes, Puddings, &c., &c., resembles that of the egg in every particular, enriching them in colour and flavour, rendering them most wholesome and nutritious. One sixpenny tin will go as far as twenty eggs. In 1d. Packets; 6d. and 1s. Tins.

SOLE MANUFACTURERS—

GOODALL, BACKHOUSE & CO
WHITE HORSE STREET, LEEDS.

A monthly Price List of Druggists' Sundries, Patent Medicines, &c., can be had post free on application.

SUPPLEMENT TO "THE CHEMIST AND DRUGGIST."

SATURDAY, NOV. 27, 1886.

MUSTARD.

FINCH, RICKMAN & CO.'S

Genuine Qualities

Are made from the finest mustard seeds only. Their compounds, as manufactured for upwards of a century, are guaranteed free from all ingredients imparting spurious heat, and are therefore equally suitable for both table and medical purposes.

6 BROKEN WHARF, UPPER THAMES STREET,
LONDON.

12½ gals. for £1, Cash free.
SPECIAL LINES FOR CASH BUYERS.

TYRER'S
WORCESTER SAUCE,
YORKSHIRE SAUCE,
"BOROUGH" KETCHUP.
BEST VALUE THAT MONEY CAN PURCHASE.

Prices and Samples sent free of all cost by
PETER TYRER, The "Borough" Ketchup & Sauce Maker,
LONDON, S.E.

SPECIAL NOTICE & CAUTION.

BRAND & CO.

The Original Manufacturers of Essence of
Beef (green label under wrapper), and
other Specialities for Invalids, have

NOT REMOVED

From their SOLE ADDRESS, No. 11
LITTLE STANHOPE STREET, MAY-
FAIR, W, and caution the trade to

BEWARE of IMITATIONS.

NESTLE'S MILK FOOD FOR INFANTS.

ALSO WELL ADAPTED FOR CHILDREN AND INVALIDS.

Prepared at VEVEY, SWITZERLAND.



The only Perfect Supplement and Substitute for
Mother's Milk.

Easy of Preparation—requires merely the addition
of water.

UNIVERSALLY RECOMMENDED BY PHYSICIANS.

THIRTY-THREE PRIZE MEDALS AWARDED to the FIRM.

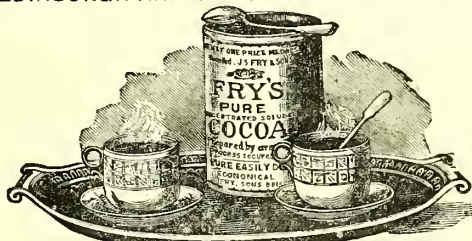
FRY'S

Pure Concentrated

COCOA

Prepared by a new and special scientific process securing extreme solubility, and
developing the finest flavour of the cocoa.

GOLD MEDALS,
EDINBURGH AND LIVERPOOL EXHIBITIONS



TRADE MARK.

J. S. FRY & SONS, BRISTOL, LONDON, & SYDNEY, N.S.W.

**NOTICE
TO CHEMISTS AND
MANUFACTURERS.**

A REAL TIME, LABOUR,
AND MONEY SAVER.

DESIDERATUM MIXER

BRACHER'S PATENT

UNSOLICITED TESTIMONIALS IN FAVOUR OF THE "DESIDERATUM" MIXER (BRACHER'S PATENT).

GENTLEMEN,—Having for the past ten years been engaged in mixing quantities of Powders, I have been on the look-out for a machine to do the work, but have been disappointed on three occasions. Yours is the only one I know of that combines the three operations of Crusher, Sifter, and Mixer, and is free from the wedging, so troublesome in other machines. After six months' trial, mixing nearly 1 cwt. per week, the apparatus is as good as new, and anyone who can turn a handle may be trusted to mix powders, as it is impossible to turn out lumpy and unmixed material with Bracher's machine.

Aberdeen and Hanover Pharmacies, Scarborough, October 2nd, 1885.

White Horse Street, Bear Lane, Leeds, June 1st, 1885.

DEAR SIRS,—The Patent "Desideratum" we had from you 3 mo., 25/85, answers our purpose.

We are, dear sirs, yours respectfully,

Messrs. BRACHER & CO.

Preston Park Pharmacy, Brighton, May 1st, 1886.

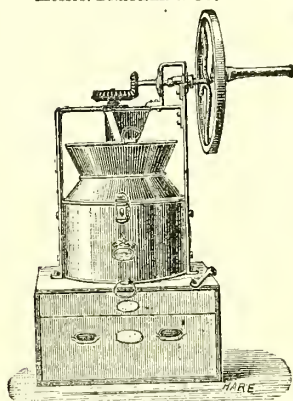
GENTLEMEN,—I think it only fair to tell you that I am delighted with the "Desideratum" Mixer you supplied me with last summer. I mix Custard Powders, Tooth Powders, Violet Powders, as well as the Crown Veterinary Powders, for all of which purposes it answers admirably. Wishing you the success you deserve,

I am, Gentlemen, yours very truly,

JOHN GRINSTED.

Messrs. BRACHER & Co.

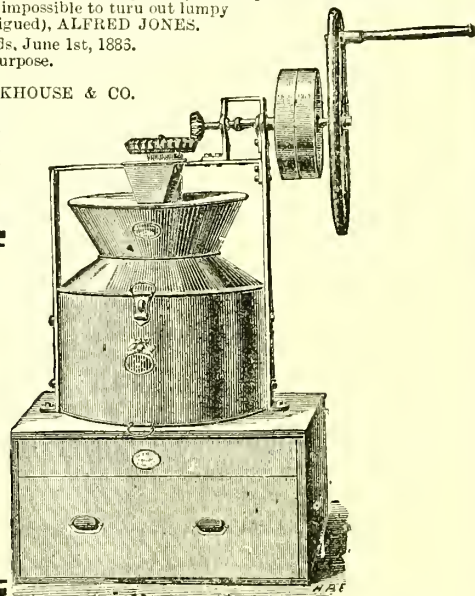
GOODALL, BACKHOUSE & CO.



CALCUTTA INTERNATIONAL
EXHIBITION.

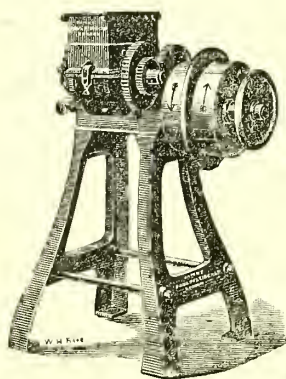


GOLD MEDAL.



Send for Illustrated Price List and full particulars, Post Free.

BRACHER & CO., WINCANTON AND YEOVIL, SOMERSET.
*All Communications to be addressed to Wincanton.



CHEMISTS' MACHINERY.

PILL MASS KNEADING MACHINES.

PILL MAKING MACHINES.

DRUG GRINDING MACHINES.

SIFTING MACHINES.

FULL PARTICULARS OF ABOVE ON APPLICATION TO

WERNER & PFLEIDERER, 86 Upper Ground St., LONDON, S.E.
Blackfriars Bridge.

CARTER'S DISINTEGRATORS.

FOR GRINDING ALL KINDS OF DRUGS, CHEMICALS, OIL SEEDS, &c.

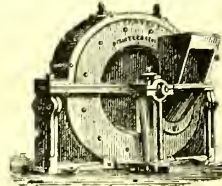
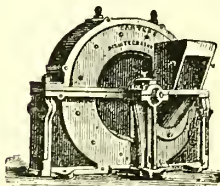
A SPECIAL SMALL SIZE, No. 0, PRICE £16, IS NOW MADE,

To SUIT CHEMISTS, DRUGGISTS, GROCERS, and others, who have
ONLY SMALL POWER AT COMMAND.

This will GRIND EFFECTIVELY SUGAR for lozings and Lozenges,
LINSEED for Poulticing Purposes, GINGER, PEPPER, COFFEE, SPICES
of all kinds, SALT for Table Use, ALMOST ALL KINDS of DRUGS,
CHEMICALS, SEEDS, &c., &c.

SEND FOR PARTICULARS, AND SEND SAMPLES OF ANY MATERIALS
AND SEE THEM GRIND.

J. HARRISON CARTER, 82 MARK LANE, LONDON; and PARIS.
Telegraphic Address—Milling London. Telegraphic Address—Cylindres Paris.



THE CELEBRATED LONDON TEAS.

A SAFE AND PROFITABLE ADDITION TO A CHEMIST'S BUSINESS.

EVERY PACKAGE SIGNED



EVERY PACKAGE SIGNED

Tower Tea

Tower Tea

THE LONDON BROKEN TEA ... for Retail at 1/8 per pound.

THE LONDON 2/- TEA, 2/0 ..

THE LONDON 2/8 ASSAM TEA... .., 2/8 ..

THE BEST TEA—HANDSOMEST AND PERFECTLY PROTECTED PACKAGES.

A CERTAIN LARGE SALE—MOST LIBERAL ALLOWANCES TO AGENTS.

VOLUNTARY EVIDENCE OF LIVING AGENTS

Chemists—to each of whom direct reference is permitted.

NORTH.

ROTHERHAM, Jan. 2, 1886.

Your Teas are giving great satisfaction in this district. The London Broken Tea is splendid value, and has won for itself a large consumption. It is only necessary to induce families to try these Teas to secure for them a permanent sale.

HUMPHREY DAVY.

CHESTERFIELD, Dec. 30, 1885.

I tried several Tea Agencies in succession, and was dissatisfied with the result, as I failed in each case to establish an increasing demand. Early in 1879 I was induced to take your Teas, and the following is, I believe, a correct statement of the quantities I sold during the first five years:—1879, 979 lbs.; 1880, 3,243 lbs.; 1881, 4,398 lbs.; 1882, 4,755 lbs.; 1883, 6,367 lbs. I have had a steadily increasing demand from the first, and am convinced that your Teas are better value for money than any wrapped Teas offered.

ALFRED LOWE.

YORK, Jan. 7, 1886.

Having been your Agent for some years, I think it only fair to say that the sale of your Teas and the satisfaction they have given to my numerous customers is highly gratifying; and, in my opinion, you place your Agents in a position that enables them to compete with anyone else in the Trade.

W. T. HEY.

SOUTH.

SALISBURY, Jan. 1, 1886.

Since I have had the Agency for your Teas, which is about five years, the sale has been steadily increasing. My customers speak in the highest terms of the Teas, and I find that when a trial has been made a regular customer is the result.

JOHN ROWE.

FOWEY, CORNWALL,

Jan. 1, 1886.

I have always found a ready sale for your Teas, and they are much appreciated by all my customers. I sell double the quantity I did at first.

J. WELLINGTON.

HERNE HILL, S.E.

Jan. 6, 1886.

I accepted the Agency for this district about twelve months ago, since which time the sale has gone on steadily increasing. Some of my customers say that the London 2/- Tea is quite equal to what they have been procuring from their grocer at 2/6, 2/8, and 3/-.

JOHN MORTIBOY.

EAST.

GREAT YARMOUTH, Dec. 31, 1885.

It is now above four years' since I commenced to sell your "London Teas," and I must confess that when I ordered the first half chest I did not expect to sell it, but am now pleased to be able to say that it sold without difficulty, and created a demand that has ever since been increasing, and has far exceeded my most sanguine expectations.

W. SHEPPARD POLL.

GRIMSBY, Dec. 30, 1885.

I have been a retailer of packet teas thirty-two years, but was never able to give my customers such good value for their money before as I have been since I accepted your Agency, upwards of four years ago.

I have never had the slightest complaint respecting your Teas, but customers are constantly saying they are the best Teas to be had in the town.

ENOCH PALMER.

WOODBIDGE (Population 4,525).

Jan. 1, 1886.

Since my introducing your Teas in March, 1883, I have sold ten times more than before. The average sale for 1884 and 1885 has been 2,557 lbs. per annum. I am daily receiving gratifying testimonials of the superior quality, blend, and flavour of the "London Teas."

EDWARD J. EATON.

WEST.

BANGOR, December, 1885.

The sale of the Tower Teas with us, considering we do not keep sugar or groceries, has realised our most sanguine expectations, as our last order, over half a ton, will go very soon.

Before your Agency we had tried two others, and failed to sell 28 lbs. in a month.

HAMILTON & JONES.

PEMBROKE, Dec. 31, 1885.

I have much pleasure in bearing testimony to the superior quality of the Teas I have received from you during the five years I have been Agent. The increased sales year by year will be sufficient guarantee of the public appreciation of it. I consider it wonderful value, and of a uniform quality and flavour. I sell twelve chests for every one I used to do in the old style. R. ORMOND.

BISHOP'S CASTLE, Jan. 2, 1886.

I have found the "London Teas" sell very well and please every class of customers. My sales in two years have increased between 600 and 700 per cent., and are still advancing—and, as you are aware, I now order from you every fortnight.

GEO. STRAWSON.

THE GREAT TOWER STREET TEA CO., LIM.

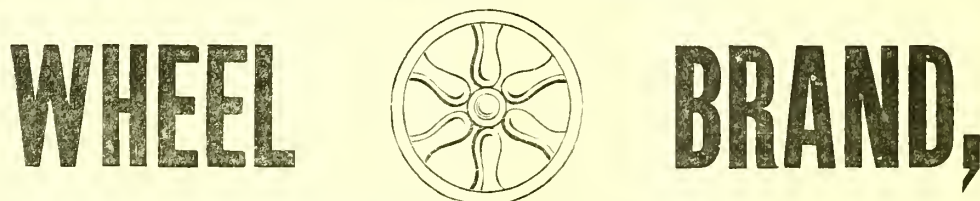
LONDON.

CHEMISTS

Who are dissatisfied with the inferior quality of other
foreign

WILLOW BOXES

as imported, for obvious reasons, by competitors, are particularly requested to specify in their orders to Wholesale Houses that they require the superior



and that they will not take another make.

I guarantee that all my Boxes are made of Best WHITE Wood, the tops and bottoms well cemented in with a special paste, so that they stand changes of temperature without coming to pieces. This special advantage makes these boxes suitable for

EXPORT

to the Colonies and all parts of the world.

My Boxes can be obtained, with very few exceptions, through all respectable Wholesale Houses in town and country; but should Chemists experience any difficulty in being supplied with my brand I shall be glad to hear from them direct.

LARGE STOCK ALWAYS KEPT IN LONDON.

PAUL METZ, 10 Jewin St., LONDON, E.C.

Telephone Number,
1852.

Advertisers' & Buyers' Reference List, AND INDEX TO ADVERTISEMENTS.

TELEGRAPHIC ADDRESS—
CHEMICS
LONDON.

ADVERTISEMENTS APPEARING IN THIS ISSUE OF "THE CHEMIST AND DRUGGIST."

Please note that to satisfy Post Office requirements the Advertisements are paged twice—once in Arabic, once in Roman numerals.

ALLEN & HANBURY'S Wholesale Druggists, Cod Liver Oil, Jujubes and Pastilles, Lozenges, 80, COVER	EDGELL BROS. Rectified Pure Spirit 24	MAYHEW, E. Foreign Agent, xxii
AMBERGHT, NELSON & CO. Cocoa Wine 24	EISNER & MENDELSON Chemicals and Patent Medicines xxvii	MAY, ROBERTS & CO. Dr. Hooper's Pills xxxiv
AI MENTHOL CONES (SHIRLEY, J. G.) viii	ELLIMAN, SONS & CO. Emulsion Text 708	MCKESSON & ROBBINS Ovoid Capsuled Pills xxiii
ANTOINE FILS Ink 25	ELVIN BROTHERS Saepe Dip, Oils, &c. 25	METCALF, THEODORE & CO. Cocoa Wine xxiii
APOLLINARIS CO. Fizzetto viii	EVANS, SONS & CO. Possilive (Paraffinum Mollis) 7, xxvii, xxx	METZ, PAUL Pine and Willow Barks iv
APOLLINARIS CO. (LIM.) Text 708	EVANS, LESCHER & WEBB, London 7, xxvii, xxx	MEYER & HENCKEL Butter Colouring 25
ASSISTANTS WANTED Coloured Supplement	EVANS, SONS & MASON, Montreal 7, xxvii, xxx	MILNE, SONS & MACFIE Sanitary Di. Infecting Cover 22
ATKINSON & BARKER Infants' Preservative xxii	EWEN, J., & SONS Clarified Lard & Toilet Soaps 20	MISCELLANEOUS ADVERTISEMENTS
AYRTON & SAUNDERS Sundries xv	EXCHANGE COLUMN Special Supplement	MORPHY, E. Walnut Pomade viii
BAILEY, W. H., & SON Trusses xvi	FINCIL, RICKMAN & CO. Mustard 3	MORRIS & CALLARD Ictetic Acid xix
BARBER, G., & CO. Crimson Marking Ink viii	FOLLOWS & BATE (LIM.) Machinery 22	MUMFORD, G. S. "Injection Day" xxvii
BARCLAY & SONS Patent Medicines xiii	FORD, SHARLAND & CO. Alumnacks for 1887, Printing, &c. 9	MURRAY, SIR JAS. Fluid Magnesia, &c. xxiv
BARKER, W., & SON Engravers Text 708	FOUGERA, E., & CO. Toilet and Nur ery Powder 6	NATIONAL CHEMICAL CO. Chloride of Lime 22
BATES, F. W. Fizzetto viii	FOULKES, W. J. Chlorodyne 17	NATION & LASLER CO. Food for Infants 1
BAUMGARTNER & CO. Metallic Powder 24	FRY, J. S., & SONS Gaskell, Deacon & Co. Spirits of Wine 22	NESTLE, H. Food for Infants 1
BEDDARD, J. Belgravia Tooth Paste 24	GASKELL, DEACON & CO. Glycerine 1	NEWBERRY & SONS Warner's Pills vii
BEECHAM, T. Beecham's Pills 15	GIBBS, J., SMITH & CO. Glycerine 1	NOAKES, B., & CO. Metallic Casks, Drums, Kegs, Containers, Boxes, &c. 20
BENNETT, C. Manna Cake xxvii	GIBSON, R. Lozenges, Sugar, &c. 10	ORME & CO. Scientific Apparatus 9
BERNSTEIN & VOIGT Chemicals xxx	GOODALL, BACKHOUSE & CO. Yorkshire Relish, &c. 11	ORRIDGE & CO. Valuers Special Supplement
BEWLEY & DRAPER, LIM. (Dichroic) xxviii	GOVERNMENT SANITARY CO., Disinfectants	PATTISON, GEORGE Lung Protector xv
BOHIM, G.T.S. Soap, Perfumery, &c. x	GT. TOWER STREET TEA CO. Tea 11	PEARCE, J. R. Food for Infants 1
BOWDLER, W. H., & CO. Patent Mizer 10	GRINDLEY & CO. Petroleum Jelly 24	PEEK & VESLOR American Medicinal Roots, &c. xxii
BRACHER & CO. Patent Mizer 10	HARRISON, F. J. Hydrochloric Soap Powder xii	PERKEN, SON & RAYMENT
BRADLEY & BOURDAS White Rouge 22	HARROP, T. Starch Glaze 20	PHILLIPS & CO. (LIM.) Foreum Merchants 25
BRAND & CO. Specialties for Invalids 11	HASSALL & CO. Phospho-Citric Acid 11	PHILLIPS, G., & CO. Pure Spirits of Wine 15
BRATBY & HINCHLiffe Aerial Water Machinery 1	HAYMAN, A. Balsam of Horehound xxviii	POLLARD, A. W. Rubber Stamps 6
BREIDENBACH & CO. Snelling Salts x	HAY, W. Hop Ale Essence 18	POT, AS, H., & CO. Dr. Enoch's Malt Extract
BREHMER, AUG. Patent Folding Cardboard Boxes viii	HEARN, RIDDELL & CO. Bottles 18	POWELL & BARSTOW Elastic Gun Bandages 24
BRITISH COLLEGE OF HEALTH Morrison's Pills xxviii	HEARON, SQUIRE & FRANCIS Turbine Text 708	RAIMES & CO. Composition Essence xxviii
BROOKS, PEEL & CO. Collapsible Tubes 28	HERTZ & COLLINGWOOD Jewels, Cod Liver Oil xxviii	ROBBINS, J. Methylene xxxii
BRUNNER, MOND & CO., LIM. Wholesale Druggists xxv	HEWLETT, C. J., & SON Wholesale Druggist xxvi	ROBERTS & CO. Foreign Chemicals xxvii
BULLEY, W. H. Bicarb. of Soda & Pure Alkali xxiii	HOOVER, B., & CO. Flexible Capsules and Putassium Pellets	ROBINSON, B. Concentrated Waters 6
BULLOCK, J. L., & CO. Pepsina Porci, &c. 17	HORMUSJEE RUTTONJEE & CO. Export Druggists 25	ROBINSON, GEO. H. Practical Trade Receipts 9
BURGESS, E. Lion Ointment and Pills xxvii	HORN & SON Patent's and Trade Marks 24	ROUSE & CO. Matthews' Fuller's Earth 20
BURGESS, WILLOWS & FRANCIS Wholesale Druggists xxv	HUNYADI JANOS Fullers' Earth 24	ROWLAND & SONS Important Notice, Coloured Supp.
BURGOYNE, BURRIDGE & CO. Wholesale & Export Druggists xxvi	HYMAN, J. Fullers' Earth 24	"SANTAS," THE COMPANY
BURROUGHS, WELLCOME & CO. Menthol Plaster, xvii, List of B. & W.'s Preparations xxvii	INGRAM & ROYLE Importers of Natural Mineral Waters COVER	SCHULTZ, ERIC, JUN. Metal Pot Lining Paste 22
BUSINESSSES FOR DISPOSAL Special Supp.	INGRAM & SON Enemas 26	SCHUTZE & CO. Druggists' Sundries xvi
BUTLER, McCULLOCH & CO. Herbalists, &c. xxviii	ISAACS & CO. Bottles 15	SCHWEPPES Table Water, &c. Text 108
CADBURY BROS. Cocoa Essence COVER	JAMESON & CO. Harness Composition, Dublin & Blacking 29	SEEGER, H. Metal Cleaning Pomatum 24
CAPPER, W. B. Crinoid net 24	JEWELL & BROWN Sparkling Table Waters 10	SELLER, J. Cornish Pur, 24
CARTER, J. HARRISON Di. Integrators 11	JOHNSON, J. H., & S. Oil of Mustard Seed 22	SHIRLEY, J. G. Ovoid Capsules viii
CHESEBROUGH MANUFACTURING CO. "Caution" xviii	JONES & MASON Methylated Spirits 22	SILICATED CARBON FILTER CO. 12
CHRISTIAN, H. J. (H. BOND) Oak Tree Marking Ink xii	JUDSON & SON (LIM.) Specialities	SILVERLOCK, H. Almanacks and Druggists' Price Books 8
CLARK, S., & CO. Gas Heating Stoves 6	KEMP, W., & SON Bessemer and Honey 25	SMITH, W. F. Pills xxxiv
CLARKE, SAML. Fairy Lamps and Light 23	KILN, B. Papain-Funkler 7	SMITH, PATENT MEAT "FIBRINE" 27
COLEMAN & CO. Ludwig's Extract of Meat and Malt Wine 14	LEVERMORE, AUG., & CO. Pure Precipitated Chalk 24	STEDMAN, J. Teething Powders xxx
COLTHERST & HARDING Paints, Varnishes, &c. 20	LIVERPOOL PATENT LINT CO. Bandages, &c. xvi	STEVENSON & HOWELL Essential Oils, &c. 13
COLWELL, H. M. Trusses 15	LIVERPOOL SCHOOL OF PHARMACY School of LONDON HOMOEOPATHIC HOSPITAL AND MEDICAL SCHOOL	STEVENSON & TRAVIS Staphium 7
CRESSWELL BROS. Sponges 1x	LYNCH & CO. Dispensing Bottles, Quinine Tinted "L" Brand COVER	SUTTON, FRANCIS & CO. Scientific 6
CRESSWELL, R., & CO. Sponges 1, 2, 3, 4, 5	MANCHESTER, THE, COLLEGE OF PHAR- MACY	SUTTON, O. OS, Tooth Brack viii
CROUCH, E. B. Damiana offers xxvii	MAY, C. A., & CO. Pottery xi	THOMPSON, H. A. Who's sale & Export Druggist xxiv
DAVENPORT, J. T. Chlorodyne (Dr. J. Collis Brown's) xxvii	MATHER, W. Plasters xiv	TOOGOOD, W. Soap Premises, Glass Bottle Manufacturer 19
DAY & SONS Horse and Cattle Medicines 27	MAUD, W. R. Se-j-acting Measur e and Finial, 25	TOWNSEND, J. Almanacks for 1887 8
DAY, SON & HEWITT Stockbreeders' Medicine Chest 27	MAY & BAKER Mercurials, Ethers, &c. COVER	TRADE MARK PROTECTION ASSOCIA- TION
DENOU, J. Medicinal Capsules xxvii	MAYHEW, E. (Wetn. Australia) 9	TYRRELL & KING Pure Acid in Hypophosphates 24
DE PASS & CO. Potrina xxvii	MAYHEW, E. (Wetn. Australia) 9	WERNER & PFLEIDERER Chemists' Machinery ii
DINNERFORD & CO. Fluid Magnesia xxvii	MAYHEW, E. (Wetn. Australia) 9	WOOLLEY, SONS & CO. Wholesale and Export Druggists xxv
DUNDAS, DICK & CO. Mentholine xiii	MAYHEW, E. (Wetn. Australia) 9	WOLTERS, O. Balances 9
DUNLOP, MITCHELL, & CO. Filters 10	MAYHEW, E. (Wetn. Australia) 9	WYLEYS & CO. Coated Pills, Pharmaceutical 17
DUNN & CO. Ictetic Acid xix	MAYHEW, E. (Wetn. Australia) 9	ZIMMERMAN, A. & M. Pure Chemicals xxxi
DURRANT, GEO., & CO. Orange Wine 24	MAYHEW, E. (Wetn. Australia) 9	

CLASSIFIED LIST OF ALL ADVERTISERS

Whose Announcements appear in "THE CHEMIST AND DRUGGIST." Those whose Names do not appear above are published in one of the other issues of this month.

AERATED AND MINERAL WTS

Asculap
Apollinaris (Hunyadi, Fried-
richshall, and Apollinaris)
Barnett and Foster
Chemists' Aerated Waters
Association
Durrant, Geo. & Co.
Ellis (Ruthin)
Gaillet, E. (Min.)
Hassall and Co. (Citric Acid,
Phospho)
Hay, W. (Hop Ale Essence)
Hunyadi Janos
Iris and Co.
Ingram and Royle (Mineral
and Vichy) Sauerbrunnen
Jewsbury and Brown
Kinnmond
Meadowcroft, W.
Mills and Co. (Bourne)
Montecat
Schweppes and Co.
Stevenson and Howell
Taylor, T. and F. J.
Vichy Thermal
Williamson, W. H. (Winter
Drink)
[See GINGER ALE.]

ACETIC ACID

Dunn and Co.
Hirst, Brooke and Hirst
Lindsey and Co.
Morris and Callard (Salts)
DITTO PLANT
[See SYPHONS AND ESSENCES.]
Barnett and Foster
Bratby and Hinchliffe
Bush, W. J., and Co. (Foam
Producer, &c.)
Favarger, H.
Guere Freres
Meadowcroft, W.
Tyler, Hayward and Co.
Vallet, L. (Bottles)
[See SYPHONS.]

ALKALOIDS

Howards and Sons (Cinchona)
Smith, T. and H.
AMMONIA
May and Baker
ANALYSTS
Corliss, Stacey and Co.
APPARATUS
Follows and Bate
Knowles, J. (Balances)
Maud, W. R.

May, Roberts (Water-bath)
Orme (Scientific)
Perken, Son and Rayment
(Scientific)
Rothermel, Paul (Vinegar)
Sutton, Francis (Analytical)
Wolters, Otto

AGENCIES

ABROAD
Cocking (Japan)
Drysdale, J. W., and Co.
Eisner and Mendelson (Phila-
delphia)
Perken, Sons and Mason
(Canada)
Felton (Melbourne)
Fougera (New York)
Hormusjee Ruttonjee (Bombay)
Kempthorne (New Zealand)
Lennon (Port Elizabeth)
MacNaughtan (New York)
Mayhew, E. (Wetn. Australia)
Phillips and Co. (Bombay)
Prosser, E., and Co. (Sydney)
Roberts (Paris, &c.)
Rocke (Melbourne)
Sharland & Co. (Auckland N.Z.)
Shirrells and Co. (Allahabad)
Stallman and Fulton
Symes and Co. (Simla)

ALMANACKS

Bowers Bros.
Ford, Shapland and Co.
Kay Bros.
Sanitas Co.
Silverlock, H.
Townsend, J.
BANK
Birkbeck Bank
BATHS
May Roberts (Water)
BEEHIVE & HONEY
Bowdler and Co.
Kemp, W., and Co.
Woolley, Sons and Co.
BENZENE, &c.
Brunner, Mond and Co.
Sanger and Sons
BICARB. SODA
Brunner, Mond and Co.
Gaskell, Deacon and Co.
Howards & Sons
May and Baker
BISMUTH PREP.
Hewlett and Sons
Howards and Sons
May and Baker
Sellers, J.

BLACKING

New Military Blacking Com-
pany
Jamieson and Co.
BOOKS
Churchill, A. and J.
Coffin, Dr.
Whitla, W., M.D.
BOTANIC BEER
Newball and Mason
BOTTLE CAPS
Hunt, W. F., and Co.
BOTTLES
Barnett and Foster
Bratby and Hinchliffe
Brooks, Peel (Perfumers)
Glasgow Apothecaries Co.
Hearn, Riddle and Co.
Isaacs and Co.
Kilner Bros.
Lang, Jones and Jules
Lynch and Co. (C.L. Brand)
Morrison, R., and Co.
Poths
Thompson, Millard and Co.
(Feeding)
Toogood
Vallet

BOXES

Austin and Co. (Cardboard)
Ayrton and Saunders (Willow)
Brücher, Aug. (Cardboard Folding)
Metz, Paul (Pine and Willow)
Robinson and Sons (Cardboard)
Self-Opening Tin Box Co.

BROMIDIA

Battle and Co.

BRONCHITIS

KETTLE.

Sanger and Sons

BRUSHES

Lynch and Co. (Electric and Tish)
Maw, Son and Thompson
Newbery and Sons
Sutton, O. S. (Tooth Brush)

BUTTER COLOUR, &c.

Bush, W., and Son (Maringoldine)
Meyer and Henckel
Oldfield, Pattinson and Co.

CAMPBOR

Howards and Sons
Keene and Ashwell (Homœopathic)
May and Baker
Murray, Sir James (Fluid)

CAPSULES

Betts and Co. (Metallic)
Denon, J. (Medicinal)
Hoover, B., and Co.
Metz ("Acme" Brand)

CARMINE

Bush, W. J., and Co.
Sellers

CASTOR OIL

Allen and Hauburys

CEMENT

Foulkes
Kay (Coaguline)

CHALK PRECIP.

Dunn and Co.
Levermore and Co.

CHEMICALS

Berestheim Vogt (Fine)
Bramwell, E., and Son
Brunner, Mond and Co.
Bush, W., and Co.
Dunn and Co.
Fletcher, Fletcher & Stevenson
Gaskell, Deacon and Co. (Bicarbonate of Soda)
Howards and Sons (Pharmaceutical)
Lindsey, C. R., and Co.
May and Baker
Morris, Calland, and Co.
Pet. Bros.
Sumner, H., and Co.
Smith, T., and H.
Type and King
Walker, Troke and Co.
Wink, J. A., and Co. (Fine)
Zimmermann, A. and M.

CHEST PROTECTRS

Evans, Sons and Co.
Haywood, J. H.
Lynch and Co.
Maw, Son and Thompson
Newbery and Son
Pattinson, G.
Thompson, Millard & Co.
Toogood, W.

CHLORODYNE

Blythe-Bage and Co. (Twemlow's)
Davenport ("Browne's")
Towie, A. P.

CHLOROPFORM, &c.

Duncan, Flockhart
Macfarlan, J. F.
Pet. Bros.
Smith, T., and H.
Wink, J. A., and Co., Lim.
Zimmermann

CITRIC ACID

Hasells (Pho-pho)

COCAINE

Howards and Sons

COCOA & CHOCOLTE

Cadbury
Fry (Malted)
Richards, J. M. (Delacere's)

COD-LIVER OIL

Allen and Hauburys
Barrington, Wellcome
Burgoyne (Peptideine)
Carr, W. G., and Son
Hertz & Collingwood
Smith, T. J.
Southall Bros. and Barclay
Woolley, Sons and Co.

COFFEE

George and Welch (Dandelion)
Symington (Various Essences)

COLLAPSIBLE

TUBES

Brooks, H., Peel and Co.

COMPOSITION

POWDER

Raines and Co. (Essence of)

COMPRESSD MDCNS

Allen and Hauburys
Barrington, Wellcome and Co.
Hooper, B., and Co.
Leo's Tablets
Newbery and Sons

CORN CURES

Chare and Jackson (Claudine)
Robinson, B.
Young's

COTTON WOOL

Haynes and Co.
Robinson and Sons (Absorbent)
Sanger, J., and Sons

DENTIFRICES

Beldard, J.
Jewsbury and Brown
Martin, J. W. (Kozallum)
Newbery and Sons
Timmer
Sutton, O., and Co.
Thompson and Capper
Woods, W. (Aerea Nut)

DENTISTRY

Buck, F. (Lenses)
Jones, Dr. C. H. (Mechanical)

DISINFECTANTS

Government Sanitary Co.
Harris and Co. (Hydroline)
Mills, Sons & Muehle (Disinfecting Cover)
National Chemical Co.
Rimmel
Sanitas
Steele & Co. (Chloride of Lime)

DOG MEDICINES

Spratts (Patent)

DRESSINGS, SURG.

[See SURGICAL.]

DRUMS, CANS, &c.

Noakes and Co.

DRUGGISTS' SUN.

Ayrton and Saunders
Bourne, Johnson
Evans, Lescher and Webb
(Hawley's Counter Adjuncts)
Evans, S. H. (Savars)
Lynch and Co.
Maud, W. R.
Maw, S., Son and Thompson
May, Roberts and Co.
Newbery, F., and Sons
Pattinson, Geo.
Sanger and Sons
Savars
Schutze and Co.
Thompson, Millard
Toogood

DURBIN

Dales, J. T.
Jamieson and Co.
New Military Blacking Co.

DYES

Ayrton and Saunders
Judson and Son

EAU DE COLOGNE

Farina, J. M. (Gegenüber)

ELECTRIC APPAR.

Darton, F., and Co.
Orme and Co.
Colthurst & Harding (Electric Light Oil)

EMBROGATION

Elliman, Sons and Co.

ENEMAS

Ingram and Son
Lynch and Co.

ENGRAVERS

Barker, W., and Son

ESSENCES, FRUIT

AND SOLUBLE

Brathby and Hinchliffe
Burgoyne, Burdidges and Co.
Bush, W. J., and Co.
Carter, H. W., and Co.
Hay's Soluble Lemon, &c.
May and Baker
Meadowcroft, W.
Stevenson and Howell
Thompson, H. A., and Son
Vogt, G.
Woolley, Sons and Co.

ESSENTIAL OILS

Bernstein and Voght
Bush, W. J. (Lemons, &c.)
Cocking (Japan Pepper)
Feltton (Eucalyptus)
Hay, W.
Lambert, S., and Co.
May and Baker
Meadowcroft, W.
Hoske, Tompsitt (Eucalyptus)
Sumner and Co.
Stevenson and Howell
Stallman and Fulton
Symes (Oil Lavander)
Type and King
Vogt, G.
Warwick Brothers
Wright, Layman and Umney

ETHER

Duncan, Flockhart and Co. (Chloric)
Howards and Son
May and Baker
Robbins

EXTRACT, MEAT

Brand and Co.
Burgoyne, Burdidges and Co. (Dr. Koch's)
Coleman & Co.
Edge Bros., Lim.
Liebig Co.
Mason, Geo., and Co.
Poths (Leite Roseonal)
R. Chards, J. M. (Delacere)

EXTRACTS, FLUID

Barber, G., and Co.
Burgoyne, Burdidges
Evans, Sons & Co.
Fletcher, Fletcher & Stevenson
Hearon, Squire and Francis
Stearns, F., and Co.
Thompson, H. A. & Son

FACE POWDERS

Chubb, J., and Co. (Violet)

FAIRY LAMPS

Clarke, S.

FEEDING BOTTLS.

Bourne, Johnson and Latimer
Hearn, Riddell and Co.
K. Her Brs.
Lang, J. and J.
Maw, S., Son and Thompson
May Roberts
Thompson, Millard
Toogood, W.

FILTERING

Dunlop and Co.
Dunlop, Mitchell and Co.
Malghen (Filtre Rapide)
Mason, Swan and Weddell
Slack & Brownlow
Solicited Crbn Filtr Co.

FOAM PRODUCERS

Bush, W. J., and Co.

FOOD, INFANTS

AND INVALIDS

Allen and Hauburys
Barrington, Wellcome (Peptonising)
Edge Bros., Lim. (Essence of beef)
Goodall, Backhouse and Co.
Hearon, Squire (Malted)
Lazenby, E., and Son
Needle, J.
Savory and Moore (Pancreatic)
(Peptonised Milk)
Southall Bros. and Barclay
Van Abbott (Diabetic)

FULLER'S EARTH

Chubb, J., and Co.
Hymans, J.
Mumford, G. S.
Rouse and Co.

FUNNELS

Lynch's (New Registered)
Maud, W. R. (Self-acting)

GINGER ALE

Bingley, J.
Harston and Co.
Hay, W.
Kinnond
Meadowcroft, W. (Essence of)
Mills, H. B.
Ross and Co.
Schweppé (Dry)
Sumner, R., and Co.

GLOVES, BATH

Pattison, George

GLYCERINE

Fink
Martindale, W. (Nitro-Glycerine Tablets)
Price's Candie Co.

GRANULAR PREP.

Bates and Co.
Bush, W., and Co.
Evans, Sons
Stearns, F., and Co.
Wright, Layman and Umney

GUMS

Fink (Arabic, &c.)

GUTTAPEPERCHA

Duncan, Flockhart

Stevens, P. A. (White)

HAIR PREP.

Bates, T. W. (Frizzetta)
Capper, W. B. (Cruidoune)
Chesebrough Mfg. Co.
James and Co.
Morley, E. (Walnut Pomade)
Rimmel
Towie Toilet Cream (Thorn-ton's)

HARNESS COMPO.

Jamieson and Co.
New Military Blacking Co. (Empress Glove, &c.)

HERBALISTS

Coffin, A. L., and Co.
De-souzier, Henri
Newball and Mason (Extract of Herbs)
Peck and Velsor
Potter and Clarke

HOMOEOPATHIO

Bristol and W. of England
Epps, James, and Co.
Gould, E., and Son
Keene and Ashwell
Leath and Rose
Thompson and Capper

HOP ALE

Hay, W.

HOSPITALS

London Homœopathic

HYPOPHOSPHITES

Dunn and Co.
Fletcher, Fletcher and Stevenson

TYPE and King**INHALERS**

Evans, Sons and Co.
Maw, S., Son and Thompson
Toogood, W.

INA

[See MARKING.]

Antoine
Bowley and Draper
Duncan, Flockhart
Jamieson Bros.

INSECTICIDES

Saidford
Steiner and Co.
Sumner, H., and Co.

KETCHUP

Tyler, P.

LANOLINE

Burgoyne, Wellcome and Co.

LARD

Ewen, J.

LEATHER

Shaw, Alexander and John

LEECHES

Potter and Clark

LICORICE

Maud (Compound)

LIME JUICE

Feltoe and Sons (Spécialité)
Idris and Co.
Moutserat (see Evans)

LINESE

Kemp, W., and Son (Crushed)

LINT

Gibbs, Cuxon and Co.
Layman and Co.
Maw, Son and Co. (Taylor's)
Newsome (Surgeons)
Robinson and Sons
Seabury and Johnson

LOZENGES

Allen and Hauburys
Blythe, Bage & Co. (Medicated)
Craven, M. A., and Son
Gibson, R. (Manufacturer)
Lynch and Co.
Mason, Geo., and Co. (Meat)
Randall and Son
Reimes and Co. (Rose)
Sacker, W. E. ("The Marie Rose")
Warwick Brothers

MACHINERY

Bracher and Co.
Carter, J. H.
Eoster, F. (Compressed Tablet)
Sherwin
Werner and Fleiderer

MAGNESIA

Bates and Co. (Citrate)
Bishop, A.
Dmuelor (Fluid)
Henry, T., and H. (Calcined)
Murray, Sir James (Lima)

MALT EXT., ETC.

Allen and Hauburys
Barrington, Wellcome and Co. ("Keyler")
Drysdale and Co. (Dry)
Poths (Dr. Linck's)
Squire

MARKING INKS

Barber, G., and Co. (Crimson)
Bunker, J.
Christian, J.
Hooper, W., and Co.
Judson, J., and Son
Murphy, J.

MEDICINE CHSTS

Day, Son and Hewitt (Veterin.)
Day and Sons

MENTHOL

A. I. Menthol Depot, J. G.
Shirley, Proprietor
Ayrton and Saunders (Cones)
Boehm, J. (Charms)
Cocking and Co.
Dundas, Dick and Co.
Gibbs, Cuxon and Co.
Lorimer and Co.
Metz, F. ("Acme")
Newbery and Son
Shirley
Spies Bros.
Symes and Co.

MERCURIALS

Bush, W., and Co.
Howards and Sons
May and Baker

METHYLATED**SPIRITS**

Burrough, J.
Gibb, Smith and Co.
Phillips, G., and Co.

METHYLENE

Robbins, J., and Co.

MICROSCOPES

Darton, F., and Co.
Perken, Son and Rayment

MIXING**MACHINERY**

Bracher and Co.
Carter, J. H.
Follows and Bate
Sherwin, G. E.
Werner and Fleiderer

MORPHIA

Macfarlan and Co.
Smith, T., and H.
Wink, J. A., and Co.

MUSE

Symes and Co. (Thibet)

MUSTARD

Finch, Rickman
Johnson, J. H. and S. (Ess. Oil)

NIGHT LIGHTS,

LAMPS, &c.

Clarke, S.

OILS, PAINTS, &c.

Allen, J.
Binghamton Oil Refining Co.
Colthurst and Harding
Cranston, W. H. (Paint Mills)
Depouzier, Henri
Elvin Bros.
Follows and Bate (Mill)
Pease, J. R., and Co.
Seddon, J., and Co.

OINTMENT BASES

Binghamton Oil Refining Co.
Burgoyne, Wellcome & Co. (Lanoline)
Chesebrough (Vaseline)
De Pass, E. A., & Co. (Petrolina)
Grindley (Petroleum Jelly)
Herrings and Co.
Metcalfe, Theo., & Co.
Saunders, C.

PAINTS [See OILS.]**PAPAIN**

Kühn, B. (Papain-Finkler)

PAPER (Sanitary)

Ayrton and Saunders (Curl and Toilet)
Bourne, Johnson and Latimer (Japanese)

PARALDEHYDE

Zimmermann, A. and M.

PATENT AGENTS

Horn and Son
Trade Marks Protection Ass.

PATENT MEDCNS

Atkinson (Infant Preserv)
Barclay and Sons (General)
Barclay and Sons (Zymolys)
Bates (Dreast Salve)
Beecham (Pills)
Benedict (Manna Cake)
Bray's Pills
British College (Morrison's)
Burgess, E. (Lion Ointment)
Carter's Liver Pills
Crouch, F. B. (Walders)
Edwards and Son
Evans, Lescher (Hawley's Counter Adjuncts)
Fennings (Powders)
George and Co. (Letch Liver)
Hayman, A. (Balsam of Horehound)
Heury's Indian Remedies
Hirst, Brooke, and Hirst
Holloway (Pills and Oint.)
Hop Bitters
Horsford (Acid Phosphate)
Kay Bros.
King's Citrate of Magnesia
Lalor (Phosphodyne, &c.)
Lincoln (Clarke's Mix.)
Lynch and Co.
Maud, W. and R. (Worm Cakes)
May, Roberts and Co.
Munday, J. (Lotion Day)
Newbery and Sons
Raines (Composition Ess.)
Richards, J. M. (American, &c.)
Roberts (Foreign)
Sanger (Widow Welch, &c.)
St. Dalmas (Bronchial, &c.)
Stearns' Non-secret
Stenhouse Patent Med. Co.
Sumner H., and Co. (Angels' Food)
Thompson, Millard and Co.
Toogood (Bella Anti-cathart)
Towie, E. (Penny Royal)

PENS

Gillott

PEPSINE, &c.

Bllock and Co.
Barrington, Wellcome
Fletcher, Fletcher and Stevenson

PENS

Jensen, C. L.
Keene and Ashwell
Newbery (Ingluvin)
Savory and Moore (Pancreatic Emulsion, Peptonised Milk)
Sellers, J.
Warner and Co. (Ingluvin)
Zimmermann

PHOTOGRAPHIC

PERFUMERY,**FANCY SOAPS.**

[See EAU DE COLOGNE.]
Barclay and Sons
Boehm Gustav (Various)
Briedenbach and Co.
Chesbrough Manufacturing Co.
Crown Perfumery Co.
De Pass and Co. (Bach Blossom)
Durrant, Geo.
Ewen (Soaps)
Grossmith, J., Son and Co.
Hirst, Brooke and Hirst
Mann, C. A.
Maw, Son and Thomson
Maubert (Soaps, &c.)
Newbery
Raines and Co. (Cachous)
Rimmel, E. (Sozialitine)
Rowland and Son (Various)
Sainsbury, S. (Lav. Water)
Sanger and Sons
Shaw, Alex. and John (Perfumery Caps)
Southall Bros. and Barclay
Warrick Brothers
West, T. (Oleum Monst)
Woolley, Sons and Co. (Powder)
Wright, W. V., and Co. (Soap, Coal Tar)

PEROX. OF HYDR.

Dunn and Co.
Robbins

PHARM. PREPS.

Allen and Hanburys
Barron, Squire and Co.
Battle and Co. (Bromidia)
Blyton, Bage, and Co.
Burgess, Willows, Francis
Burkoyne, Burdidge
Burroughs, Wellcome (Various)
Clay, Dod and Co.
Corbyn, Stacey (New Preps.)
Duncan, Flockhart
Evans, Sons and Co.
Fellows (Hypophosphites)
Fletcher (Liquor for Syrups)
Hearon, Squire and Francis
Hewlett and Sons
Hirst, Brooke and Hirst
Hooper, B., and Co.
Howards and Sons
Kay Bros.
Keith (Conc. Tinctures)
Martindale (Nitroglycerine)
Oldfield, Pattinson and Co.
Savory and Moore
Sellers, J.
Southall Bros.
Squire (Chemical Food, &c.)
Symes and Co.
Thompson, H. A., and Son
Walker, T. (Tincture)
Wink, J. A., and Co.
Woolley, Sons
Wyles (Various)

PILLS (Coated, &c.)

Allen and Hanburys (Schief-
fains)
Beecham, Thomas
Hooper, Dr.
McKesson and Robbins (Ovoid-
causuled)
Morrison
Newbery
Robertson, J. (Machine)
Sanger, J., and Sons
Stenhouse (Rheum. and Gout)
Smith, W. F.
Towle (for Females)
Warner, W. R. (Coated)
Wyles and Co.

PITCH

Peace, J. R., and Co.

PODOPHYLLIN, &c.

Keith, B. and Co.
Smith, T. and H.

POLISHING

Baumgartner (La Brillantine)
Bradley, Bourdais (Albatum)
Jamieson and Co.
New Military Blacking Co.
Linn. (Metal)
Coke, John, and Sons
Schulz, Fritz (Paste)

PORCELAIN GDS

Lynch (Lock-lid Covered Pots)
Poths, H., and Co.
Toogood (C.C. Pots, regist.)

PRINTING

Blake and McKenzie
Bowers Bros.
Ford, Shapland and Co.
Silverlock, H.
Townsend, J. (Exeter)

PYROGALLIC ACID

Bernstein & Vogt

QUININE SALTS

Drysdale J. W., and Co.
Howards and Sons
Zimmermann

RENNET

Meyer and Henckel

RESPIRATORS

Bourne, Johnson and Co.
Evans and Co.
Maw, S. Son and Thompson
Sanger, J., and Son

SALICINE

Macfarlan and Co.

SALT

Hassall, Thos. (Bay)

SAUCES, PICKLES

Goodall (Yorkshire Relish)
Lazenby (Harvey's)

SCHOOLS OF STOPPERS**PHARMACY, &c.**

Edinburgh Classes
Liverpool School
London Homoeopathic
Manchester College
South London School
The School of Pharmacy
Tully, J.
Westminster College

SEALING WAX

Waterston and Sons

SEIDLITZ POWDERS

Chubb, J., and Co.

SELTOGENES

Idris and Co.
May, Roberts

SHAVING

Howden (Euxesia)
Lloyd, A. S. (Euxesia)

SHEEP DIP

Elvin Bros.
Grindley

SHOP FITTERS

Bowling and Govier
Bygrave, J. and W.
Howlett, S.
Lemaitre, W., and Co.
Lynch and Co.
Maw, Son and Thompson
Stefan T., and Co.
Tomlinson and Sons
Treble, G., and Son

SOAP (SOFT, &c.)

Chiswick Soap Co.

SPECTACLES

Darton, F., and Co.
Perken, Son and Rayment

SPIRIT, PURE AND**METHYLATED**

Burrough (Pure & Methyl.)
Edgell, Bros. (Pure)
Gibbs, Smith and Co.
Harvey, J. W., and Co.
Jones and Mason (Methyl.)
Phillips, G., and Co. (Pure)

SPONGE

Cresswell, R., and Co.
Cresswell Bros.
Peterson, M.
Schutze and Co.

STAMPS

Lindner, M.
Pollard, A. W.

STARCH

Critchley (Gloss)
Harron's Glaze
The Patent Borax Co.

Austin and Co. (Sprinklers)
Barnett & Foster (The Eclipse)
Bredenbach and Co. (Pt. Lock)
Brooks, Peel (Sprinklers)
Lazenby, E., and Son (Barrett's Patent)
Valler

STOVES

Clarke, N., & Co. (Gas Heating)

SUGAR

Gibson, R.

SURGICAL

Hutchison, A., and Co.
Ingram and Son
Marks, A. A. (Artificial Limbs)
Maw, Son and Thompson
Powell and Barstow (Elastic Gum)
Thompson, Millard and Co.
Woolley, Sons, and Co.

SYPHONS

Barnett and Foster
Idris and Co.
Lang, J. and J.

SYRUPS

Fletcher, Fletcher (Liquors)
Idris and Co.
Stevenson and Howell

TEA

Spinner and Co.
The Gt. Tower St. Tea Co.
Walker and Dalrymple

THERMOMETERS

Darton, F., and Co.
Immsch's Patent (Metallie)
Perken, Son and Rayment

TIN CANISTERS

Noukes, B., and Co.
Self Opening Tin Box Co.

TIN FOIL

Betts and Co.

TOBACCO

Follows and Bate (Cutter)

TRADE MARKS**REGISTERED**

Horn and Son
Trade Marks Protection Ass.

TRUSSES

Bailey, W. H. and Son
Colwell, H. M.
Haywood, J. H.
Lynch and Co.

URETHANE

Howards, Sons and Co.

VACCINATION

Association for the supply

VALUERS AND**TRANSF. AGENTS**

Orridge and Co.

VARNISH

Colthurst and Harding
Seddon, J., and T.

VERMIN KILLERS

Battle, J. R.
Sanford and Son

VETERINARY

Chesbrough (Vaseline, &c.)

Day, Son and Hewitt

Garbett, R. (Fumigators)

James, Lieut.

James, H. J. (Blister)

Sonnet's Dogs

Walker, Troke and Co.

VINEGAR

Grumble and Co. (Pure)

Rothermel (Makings)

WHEAT & EXPT**DRUGGISTS**

Allen and Hanburys
Barron, Squire and Co.
Burgess, Willows
Burgoyne, Burdidge
Bush, W., Son and Co.
Clay, Dod and Co.
Evans, Lescher and Webb
Evans, Sons and Co.
Evans, Sons and Mason
Hearon, Squire and Francis
Herrings and Co.
Hewlett and Son
Hirst, Brooke and Hirst
Oldfield, Pattinson and Co.
Potter and Clarke (American
&c.)
Raines and Co.
Southall Bros. and Barclay
Stevenson and Howell
Summer, R., and Co.
Thompson, Henry Ayscough
and Son
Thompson, Millard and Co.
Type and King
Walker, Troke and Co.
Woolley, Jas., Sons and Co.
Wright, Layman and Unney
Wyles and Co.

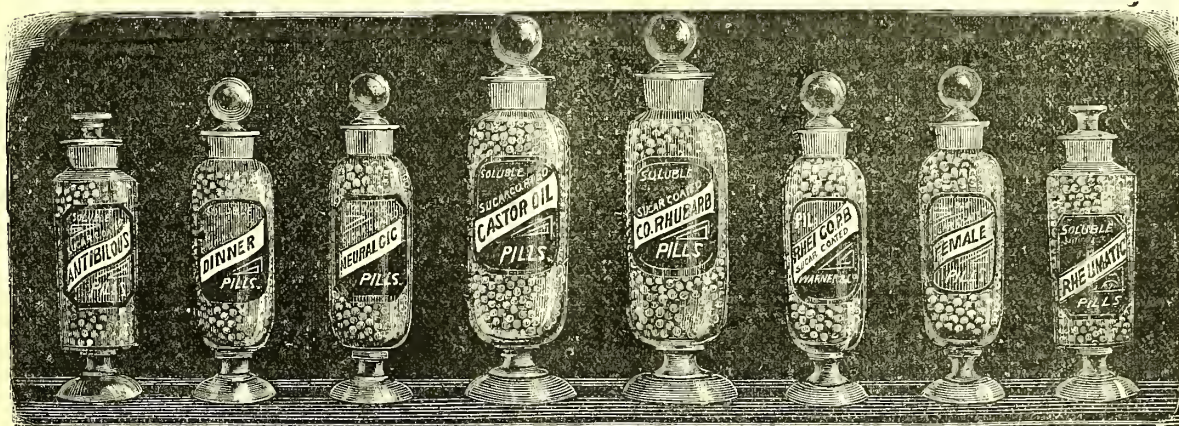
WINES AND SPIRITS

Ambrecht, Nelson and Co. (Coca
Wine)
Coleman and Co.
Durrant, G. (Orange)
Edgell Bros. (Rectified)
Hirst, Brooke and Hirst
(Orange)
Ingram and Royle
Metcalfe, Theo., and Co. (Coca
Wine)
Robinson, B. (Orange)
Williamson, W. H. (Orange)

ELEGANT COUNTER PILL VASES,

PRICES MATERIALLY REDUCED.

SEE NEWBERY'S 1886 CATALOGUE.



Photographic Wood Cut of an assorted "Stand" of Counter Vases of Pharmacopœia Pills or Granules (W. R. Warner & Co.), "Globe Stoppered" or Square Shouldered. These Vases are fitted with hand-painted, gold-bordered Labels, of which those named are usually in Stock. Height of Vase to top of Stopper, about 11 inches. DESIGN REGISTERED.

St. Columb, Cornwall,

Jan. 10th, 1885.

Messrs. F. NEWBERY & SONS,

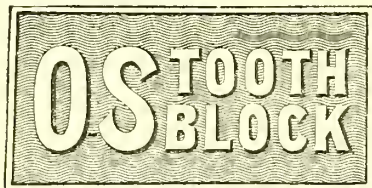
GENTLEMEN,—I was much pleased with the Vases and Pills you sent me, and wish to remit. Will you kindly send me, etc.

Yours truly,

(Signed) E. GRIFFITH, Chemist.

THE BEST & SAFEST DENTIFRICE.

OSCAR SUTTON & CO., Preston, Lancashire.



REGISTERED TRADE MARK.

The following Testimonial from Mr. JAMES A. REID, Chemist and Druggist, Helensburgh, we quote by special permission: "Enclosed please find cheque in payment for the Tooth Blocks. I am highly pleased with their new form and extra inducements presented through the leatherette labels and chemist's own name stamped on each block. These give one special encouragement to keep prominently before an intelligent public what UNDOUBTEDLY IS THE GREATEST DENTIFRICE OF THE AGE."

No. 0.
Loose, without Boxes.

No. 1.
In Patent Metallic Boxes,
retail 1s.

No. 2.
In Crystal Caskets,
retail 2s. 6d.

OVER 1,000 TESTIMONIALS.



WHICH IS CHANGED BY HEAT TO A JET BLACK.

Put up for Retail Sale in 6d., 1s., 2s., 2s. 6d., and 5s. Bottles.

Also Barber's Concentrated Liquid COCHINEAL, for Colouring Jellies, Custards, &c.

Put up in 6d. and 1s. Bottles.

MANUFACTURED ONLY BY THE PROPRIETORS—

G. BARBER & CO., 6 Worcester Drive, Club Moor, LIVERPOOL.

Can be obtained through any of the Wholesale Firms, or from the Proprietors, G. BARBER & CO., Club Moor, Liverpool.

STOP!!

BE READY
FOR

WINTER SEASON.

25/- of A1 BRAND MENTHOL will realise 48/-,
Or a Profit of 23/, which is over 90 per cent.

Send a cheque for 25/, and I will forward either of the following, together with a HANDSOME GLASS-FRONTED SHOW CASE and ROUND HANDBILLS:—

Order as
Parcel
A B C or D.

PARCEL A.
4 dozen 6d.
2 " 1s.

PARCEL B.
3 dozen 1s.
2 " 6d.

PARCEL C.
8 dozen 6d.

PARCEL D.
4 dozen 1s.

Illustrated
Price List post
free on
application.

Of all Wholesale Houses,
or direct from

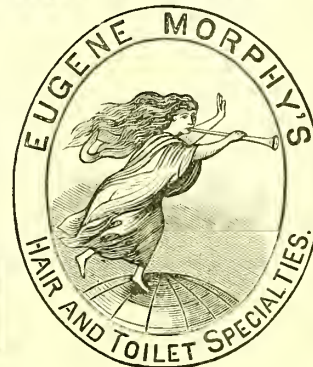
J. G. SHIRLEY, 30 Paternoster Square, E.C.

This Unique Preparation has the extraordinary
property of keeping the

HAIR IN CURL.

Now used by Ladies in all
parts of the World.Needs but an introduc-
tion to command
a ready and
constant
sale.FRIZZETTA
(REGISTERED.)
Handsome Show-
cards, Glass Tablets, and
Circulars profusely supplied.
Foreign and Colonial Chemists
should write for Terms, &c.F. W. BATES, CHEMIST,
BROOKS'S BAR, MANCHESTER.

WALNUT POMADE.



A Triumph as a Hair
Darkener.
Easy to Apply.
Easy to Remove.
Once Commenced—always
Used.

As a simple, effective, pleasant, and
nourishing preparation it can be con-
scientiously recommended to a cus-
tomer whose hair is becoming grey,
red, or white.

Three Colours—Light Brown, Dark
Brown, and Black.

Pots— $\frac{3}{4}$ oz. (1/6) 12/ per doz.
1 $\frac{1}{2}$ oz. (2/6) 20/ per doz.

Agents—Bacley & Sons, Edwards
& Co., Maw, Son & Thompson, and
Sanger & Sons.

Sole Manufacturer & Proprietor—
EUGENE MORPHY,
70 South Audley St., Mayfair,
LONDON.

MAUBERT'S
GENUINE BROWN WINDSOR & HONEY SOAPS
ARE THE BEST AND MOST ECONOMICAL.

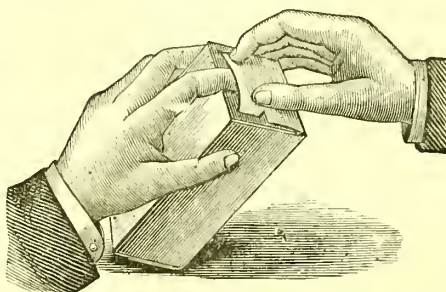
ALTHÆA

A NEW SOAP ALREADY IN GREAT DEMAND ON
THE CONTINENT, PACKED INELEGANT GLOVE or HANDKERCHIEF BOXES
CONTAINING

12 TABLETS, weighing each about 5 oz., price 3/0 per box.
6 TABLETS, " " " price 1/9 per box.

WHOLESALE PRICES ON APPLICATION TO

6 LOVELANE, ALDERMANBURY, E.C.

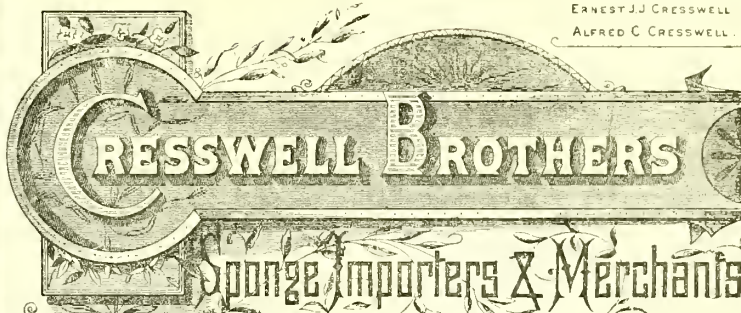
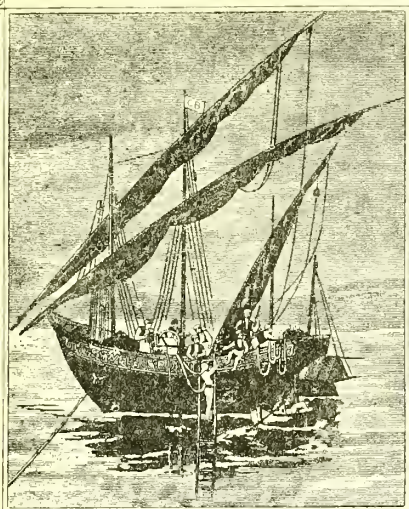
AUG. BREHMER'S
PATENT FOLDING CARDBOARD BOXES,

Especially suitable and highly recommended
for packing up Proprietary Goods, Cereals,
Foods, Patent Medicines, &c.

Superior Paper Wrappers in needness
of appearance and strength, and therefore
affording great protection to bottles &c.

ESTIMATES AND SAMPLES FREE ON APPLICATION.

Steam Factory—3 & 4 Moor Lane, Fore Street, London, E.C.



FREDERIC R CRESSWELL
ERNEST J J CRESSWELL
ALFRED C CRESSWELL

SPONGES OF EVERY DESCRIPTION DIRECT FROM
GREECE, TURKEY, THE BAHAMAS, FLORIDA & CUBA

13^A RED LION SQUARE, LONDON, W.C.

TELEGRAPHIC ADDRESS—"CUBANS LONDON."

CUBAN SPONGES.

THE CUBAN FINE SPONGES, introduced to the English Market by ourselves, *can only be obtained from us*, as we are the **SOLE AGENTS** for the CUBAN SPONGE FISHING CO. The remarkable success which has attended the introduction of these goods has led to *inferior qualities of entirely different origin being unscrupulously and dishonestly offered to the Trade as the genuine article*. Buyers should beware of this *gross deception*. The following quotations are for Sponges that are **STRONGER, FINER, and CHEAPER** than any others so offered, which facts will be found to be fully substantiated on their being compared with the *pseudo* Cuban Sponges:—

C1 Cuban Fine	...	...	100	pieces	£5 0 0	C8 Cuban Honeycomb, 1st quality, 150 pieces	£5 0 0
C2 do.	...	...	150	„	5 0 0	C9 do.	do. 200 „ 5 0 0
C3 do.	...	...	200	„	5 0 0	C10 do.	do. 400 „ 5 0 0
C4 do.	...	...	400	„	5 0 0	C11 do.	2nd quality, 100 „ 3 15 0
C5 Cuban Honeycomb, 1st quality	50			„	5 0 0	C12 do.	do. 150 „ 3 15 0
C6 do.	do.		75	„	5 0 0	C13 do.	do. 225 „ 3 15 0
C7 do.	do.		100	„	5 0 0	C14 do.	do. 400 „ 3 15 0

CRESSWELL BROTHERS are offering, at lower prices than any other firm, **Mediterranean Honeycombs and Fine Turkey Cups and Solids**, bleached and unbleached, in cases, on strings, on cards, or by weight.

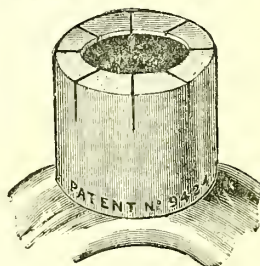
FULL PRICE LIST POST FREE ON APPLICATION.

PLEASE NOTE STYLE OF FIRM AND ADDRESS,

CRESSWELL BROTHERS, 13^A RED LION SQUARE, LONDON, W.C.

BREIDENBACH'S PATENT LOCK STOPPER

INEXHAUSTIBLE SMELLING SALTS.



By this means the stopper is never released from the bottle except when required; it is then simply withdrawn in the ordinary manner and replaced without the slightest difficulty. The object of this invention is to retain the PUNGENCY and STRENGTH of the Salts for a much longer period than in the ordinary bottle.

PRICES.

Watch Shape, Plated Silver Mounts.									
Nos.		Retail		Wholesale, per doz.					
845	...	1 6	...	12 -					
846	...	2 6	...	20/-					

Watch Shape, Solid Silver Mounts.									
Nos.		Retail		Wholesale, per doz.					
840	...	3 6	...	28 -					
841	...	5 6	...	44 -					
842	...	7 6	...	60 -					

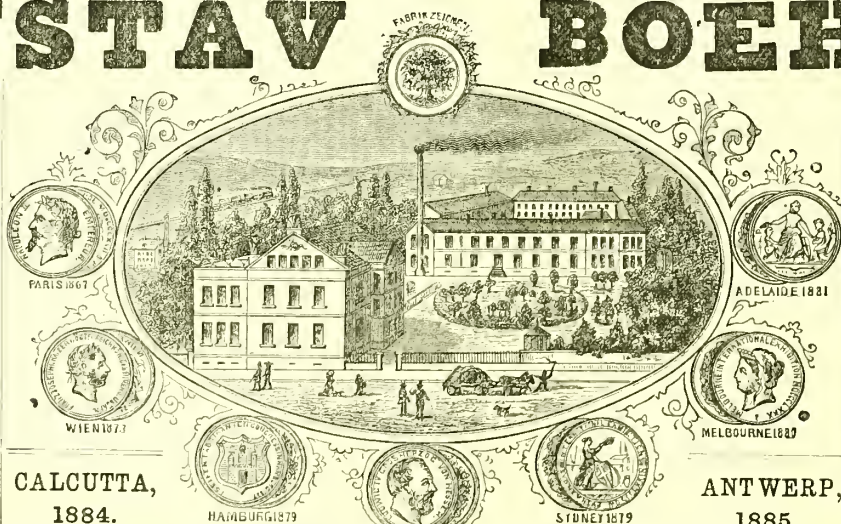
SUBJECT TO USUAL DISCOUNT. TO BE OBTAINED THROUGH ANY DRUG HOUSE, OR DIRECT FROM

BREIDENBACH & CO., Wholesale & Export Manufacturing Perfumers, 157^B New Bond St., LONDON, W.

Illustrated Price List for 1887 forwarded upon application. New Illustrated Shipping Catalogue now ready.

GUSTAV BOEHM,

SOAP
MAKER
AND
PERFUMER.



38 Moreland
Street,
City Road,
London, E.C.
and at
Offenbach
o/Main.

BOEHM'S TRANSPARENT GLYCERINE SOAP, Manufactured with Pure Spirits of Wine and Purest Glycerine.

BOEHM'S HIGHLY SCENTED PURIFIED TOILET SOAPS—Ess. Bouquet, Jockey Club, Rose de Mai, Eau de Cologne, New Mown Hay, Lavender, Tea Rose, Violet, Mignonette, and many others.

BOEHM'S CALCUTTA GOLD MEDAL EXHIBITION SOAP, Assorted in Six Scents and Colours; a First-class Toilet Soap.

BOEHM'S TRIPLE, DOUBLE, AND SIMPLE EXTRACT OF FLOWERS, in Fancy, Plain, and Cut Glass Bottles, and in Bulk.

BOEHM'S LAVENDER, FLORIDA, AND COLONIAL TOILET WATERS.

BOEHM'S PETROSINE POMADE AND PETROSINE IN BULK (Petroleum Jelly).

BOEHM'S MENTHOL CHARMS AND CONES, made of Guaranteed Pure Menthol.

MANN'S PERFUMES.

The accompanying cut represents a facsimile of our Pound Bottle, containing 18 fluid ounces, with elongated and etched stopper for trying the odours. We have arranged our Perfumes into ranks according to popularity and demand; those having the most ready sale comprise the first rank, then, next in order, the second rank, then the third rank. This plan gives the Druggist at a glance a more comprehensive idea of our line, and also enables him to make his selection according to the general popularity of the odours. We would always advise a full line of all the perfumes kept in stock, as the second and third ranks contain many odours desired by persons of special tastes, and, while they are not generally of as ready sale as those of the first rank, yet they are always staple. The goods are all made of the same degree of strength, and are intended to be of equal desirability, yet some will take precedence in popular favour over others. We make only the finest quality of Perfumes, which are especially designed to meet the demand of the best drug trade throughout the world.

PERFUMES


OF THE FIRST RANK IN POINT OF POPULARITY.

Lady of the Lake.
White Lilac.
White Rose.
Heliotrope.
Jockey Club.
New Mown Hay.
Lily of the Valley.
Prairie Flower.
Wild Lotus.
Queen of May.
Myrtle Bloom.
Ylang Ylang.
Stephanotis.
Violet.

PERFUMES

OF THE THIRD RANK IN POINT OF POPULARITY.

Musk.
Patchouly.
Rose Geranium.
Tea Rose.
Rondeletia.
Night Blooming Cereus.
Ess. Bouquet.
Millefleurs.

 *Illustrated Catalogue*
furnished upon application.

PERFUMES

OF THE SECOND RANK IN POINT OF POPULARITY.

Carnation Pink.
Mignonette.
Ocean Spray.
Tuberose.
Jasmin.
Moss Rose.
Pond Lily.
Frangipanni.
Orange Blossom.
Musk Rose.
Trailing Arbutus.
Honey Suckle.
Sweet Briar.
Sweet Pea.
West End.
White Heliotrope.
Wood Violet.

PRICE LIST.

	Per doz.
1/2 oz., assorted odours...	8
3/4 " " " " " "	14
1 1/4 " " " " " "	20
2 1/4 " " " " " "	32
3 1/4 " " " " " "	42
4 3/4 " " " " " "	62
9 " " " " " "	112
18 " " " " " "	216
1 " " " " " "Tourist	16
Small trial size, per gross	23
Large " " " " "	35

Our Perfumes combine richness of fragrance with delicacy and permanence of odour. They may be handled and retailed either from bulk or in small packages, both in cold and warm climates, without appreciable deterioration of quality. They take the lead and enjoy the preference in all countries wherever introduced.

Hoping to receive your orders, we are,

Yours very respectfully,

C. A. MANN & CO., 43 MURRAY ST., NEW YORK CITY, U.S.A.



HYDROLEINE

(HYDRATED)

SANITARY SOAP POWDER.

This **MARVELLOUS CLEANSER** is the only Soap Powder used and recommended by the Medical Profession because of its harmlessness and extreme purity. Sold in tinfoil packets 1*d.* each, and in blue wrappers 2 for 1½*d.*; also in 1, 2, 4, and 7 lb. bags, for family use, at 3*d.* per lb.

The British Medical Journal, Nov. 23, 1885, says:—"The Hydroleine preparations will soon come largely into use, and rank as general favourites. The Laundry Powder is especially valuable, and cannot fail to be fully appreciated; whilst the Disinfecting Powders and Preparations for cleaning brushes and sponges are most useful. We have been much pleased with the results of our examination, and have much pleasure in recommending a trial of Hydroleine."

The London Medical Record, Dec. 15, 1885, Edited by Dr. Ernest Hart, Chairman of the National Health Society.—"The New Hydroleine (Hydrated Soap Powder) is of considerable value for all cleansing purposes, and is well adapted for use in the Laundry. It dissolves readily, forming a solution which lathers freely. An analogous preparation is the Hydroleine Carbolized Soap Powder, which is sold at a very moderate price, and is a powerful disinfectant. There are other Powders, intended for cleansing and reviving carpets, and for washing sponges and brushes. We have tried them all, and have no hesitation in saying that they are most efficacious. These Hydroleine Compounds are thoroughly reliable, and will come speedily into general use."

HYDROLEINE—Hydrated Soap Powder (Carbolized).

Specially prepared with refined Carbolic Acid, for Cleansing Bedrooms, Domestic Offices, &c., as a preventive of disease. In ½-lb. and 1-lb. Tins, at 4*d.* and 6*d.* each.

HYDROLEINE SANITARY DISINFECTING POWDER.

The Latest, Purest, and Most Powerful Disinfectant known. Packed in Tins at 3*d.*, 6*d.*, and 1*s.* each.

HYDROLEINE CARPET CLEANSER AND REVIVER.

A novel preparation for Cleansing Carpets, &c., and reviving the colours. In Tins, 6*d.* each.

HYDROLEINE BRUSH AND SPONGE POWDER.

For Cleansing Brushes and Sponges. In Tins, 6*d.* each.

To be obtained at **WHITELEY'S**, Westbourne Grove; **SHOOLBRED'S**, Tottenham Court Road; **BARKER'S**, Kensington; the Stores, and of all Grocers, Oilmen, and Chemists; and Wholesale of

F. J. HARRISON & CO., LIM., WATLING STREET WORKS, LEICESTER.

N.B.—If your tradesman does not keep the above, please send post-card, when the address of the nearest agent will be sent to you.

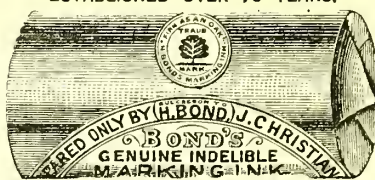
IMPORTANT TO THE TRADE. SELL THE ORIGINAL AND GENUINE

HENRY BOND'S "OAK TREE" INDELIBLE MARKING INK

The proprietor guarantees this Ink prepared from the Original Recipe of the Inventor, H. BOND. It produces an INTENSE JET BLACK, and can be freely used with or without heat, and never any risk whatever of injury to the most delicate fabric.

ESTABLISHED OVER 70 YEARS.

Importers and the trade are respectfully CAUTIONED against spurious Imitations. The genuine H. Bond's Marking Ink bears the Trade-mark, an "Oak Tree," and the name CHRISTIAN on each wrapper.



Two injunctions have been granted to H. Bond's legal successors restraining the use of the name 'H. Bond's Marking Ink,' one as recently as November 17, 1882, against F. J. Bond.

IMPORTANT TRADE TESTIMONIALS!!!

To Mr. J. CHRISTIAN,
46 City Road.

Dear Sir,—In reply to your inquiry, we have pleasure in stating that for many years past we have sold large quantities of your "H. Bond's Oak Tree Marking Ink," seldom, if ever, receiving complaints of same.

Yours truly, BARCLAY & SONS (per R. W.), Wholesale Druggists.

To Mr. J. CHRISTIAN,
46 City Road, E.C.

Dear Sir,—Referring to the subject of your visit this morning, we are pleased to say that we cannot call to mind any case of complaint of your "Oak Tree" Ink during the years in which we have supplied the article to our customers.

We are, dear Sir, yours faithfully, F. NEWBERRY & SONS.

Farrington Street, London, E.C.
July 1, 1886.

To Mr. J. CHRISTIAN,
46 City Road, E.C.

Dear Sir,—We are pleased to say that since we first sold your Marking Ink, "Oak Tree" brand, we have never had a complaint of its quality; and, as our sale grows, we naturally assume that it is approved of.

Yours truly, LYNCH & CO.

To Mr. CHRISTIAN,
46 City Road, E.C.

Dear Sir,—We have sold your Marking Ink for upwards of 25 years, and cannot call to mind an instance of complaints as to its quality.

Yours faithfully, C. & E. LAYTON, Wholesale Stationers.

Aldersgate Street, London.
October 27, 1882.

Ordinary Inks in all convenient forms for export and counter trade 6*d.* and 1*s.* in blue wrapper, Red Trade Mark, boxed or carded in 1 dozen each. 6*d.* and 1*s.* Pedestal, with Stretcher, in ½ dozen, and 1 dozen boxes: ½ oz. and 1 oz. stoppered Bottles, in boxwood case, for the use of large establishments, 2*s.* 6*d.* and 5*s.* each. Complete Illustrated Price List on application.

Write for handsome Showcard, Handbills, and Specimen on Linen. Liberal Discounts to Shippers and the Trade.

Sample Bottle supplied gratis and sent post-free to any part of the world on receipt of business card.

To be obtained through all the leading wholesale houses in the United Kingdom.

Prepared only by J. CHRISTIAN, Sole Proprietor, 46 City Road, London, E.C.

BARCLAY & SONS,

95 FARRINGDON STREET, LONDON.



PROPRIETARY MEDICINES

Lozenges, Mineral Waters, Perfumery, Druggists' Sundries,
Bougies, Catheters, Elastic Stockings, Trusses, and
Miscellaneous Articles.

SPECIAL AGENCIES UNDERTAKEN

For Home or Foreign Proprietary Articles

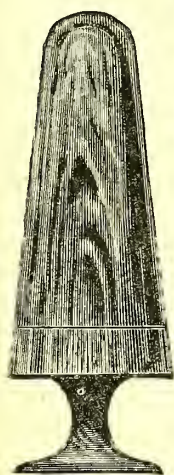
ON THE MOST FAVOURABLE TERMS.

Catalogue will be forwarded Post Free on receipt of Business Card.

EXPORT ORDERS PROMPTLY & CAREFULLY EXECUTED.

INDENTS SENT THROUGH MERCHANTS SHOULD BEAR OUR NAME.

BARCLAY & SONS, 95 FARRINGDON STREET.

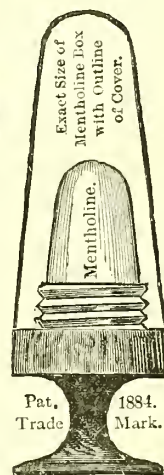


*Medal Awarded
International Exhibition,
London, October, 1885.*

MENTHOLINE.



*The Original
Absolutely Pure
Menthol Cone.*



THE TRUE JAPANESE HEADACHE CURE."

Guaranteed to be only the finest Japanese Menthol, entirely free from oil, Whiter, Firmer, more Crystalline than any other brand, and absolutely pure, making it more valuable for all the purposes for which ordinary Menthol is used. Its hardness and solidity specially fits it for sale and use in hot climates, and also makes it the cheapest Cone to be used in any climate, as it lasts longer than any other Cone. This curious remedy, used in Japan for ages, instantly relieves and removes Nervous Headache, Toothache, Earache, Faceache, Faintness (from over-crowded churches, theatres, &c.), Catarrh, or cold in the head, and many other nervous aches and pains; it also certainly relieves Neuralgia, Rheumatism, Sciatica, and other nervous affections; and has a tendency to produce refreshing sleep.

USED BY SIMPLY RUBBING.

Taken internally it relieves Flatulence, Nausea, Colic, and other pains, and is good in cases of Sea-sickness.

No other Remedy in the World so Valuable (costing more than Quinine), so Pure, and so very useful in so many ways, is sold for 1s. per box.

SOME DRUGGISTS HAVE SOLD ONE THOUSAND BOXES. [1]

Price per dozen, 6s. 6d., subject to usual Discount.

DUNDAS, DICK & CO., Manufacturers, NEW YORK.

For Sale by FRANCIS NEWBERRY & SONS, 1 King Edward Street, Newgate Street, LONDON, E.C.


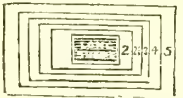




IMPORTANT TO PHYSICIANS, SURGEONS, & CHEMISTS.

ROYAL BALSAMIC

PLAISTERS

MANUFACTURED BY WILLIAM MATHER,

Are manufactured of the same kind of ingredients as those sanctioned and ordered by Dr. Andrew Smith, Director-General of Her Majesty's Army and Navy Ordnance Medical Department, for the use of the Soldiers and Marines in Scutari Hospital.

LEATHER PLAISTERS.	No.	Full Size of Leathers.	Retail Prices.	Per doz.	Royal Balsamic Plaster.	Cod Liver Oil.	Plain Plaster.	Emp. Roborans or Calefaciens	Emp. Belladonna. No. 1.	Emp. Belladonna. No. 2.
		Inches.	d.		s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Heart Shape 	1	3 x 4½	1 size.	"	0 8	0 8	0 8	0 8	1 4	1 0
	2	4½ x 6	1½ "	"	1 0	1 0	1 0	1 0	2 0	1 6
	3	4½ x 7½	2 "	"	1 6	1 6	1 4	1 4	2 8	2 0
	3½	5½ x 7½	3 "	"	2 3	2 3	2 0	2 0	4 0	3 0
	4	6½ x 8½	4 "	"	3 0	3 0	2 8	2 8	5 4	4 0
	5	8 x 9½	6 "	"	4 6	4 6	4 0	4 0	8 0	6 0
Long Shape 	1	2½ x 4	1 "	"	0 8	0 8	0 8	0 8	1 4	1 0
	2	4½ x 6½	2 "	"	1 6	1 6	1 4	1 4	2 8	2 0
	2½	4½ x 8½	3 "	"	2 3	2 3	2 0	2 0	4 0	3 0
	3	5½ x 9½	4 "	"	3 0	3 0	2 8	2 8	5 4	4 0
	4	6½ x 11	6 "	"	4 6	4 6	4 0	4 0	8 0	6 0
	5	7½ x 14½	8 "	"	6 8	6 8	6 0	6 0	12 0	8 0
Oval Shape 	1	4½ x 6½	2 "	"	1 6	1 6	1 4	1 4	2 8	2 0
	2	6½ x 8½	4 "	"	3 0	3 0	2 8	2 8	5 4	4 0
	3	7½ x 9½	6 "	"	4 6	4 6	4 0	4 0	8 0	6 0
Saddle Shape 	1	6½ x 12½	6 "	"	4 6	4 6	4 0	4 0	8 0	6 0
	2	7 x 15	8 "	"	6 8	6 8	6 0	6 0	12 0	8 0
	3	8 x 16	12 "	"	8 8	8 8	8 0	8 0	15 6	12 0
Wrist 	1	3 x 10½	3 "	"	2 3	2 3	2 0	2 0	...	...
Knee 	2	4½ x 15	6 "	"	4 6	4 6	4 0	4 0	...	...

BREAST PLAISTERS.	No.	Size of Leather	Retail Prices.	Per doz.
			d.	s. d.
Emp. Plumbi, for Ladies' Breasts	1	Diam. 6½ in.	4 size	2 8
Emp. Plumbi, for Ladies' Breasts ..	2	" 7½ "	6 "	4 0
ditto spread on Chamols ..	1	" 6½ "	.. "	4 0
ditto ditto ..	2	" 7½ "	.. "	6 0
BREAST PLAISTERS.	No.	Size of Leather	No. 1 Quality. Per doz.	No. 2 Quality. Per doz.
			s. d.	s. d.
Emp. Belladonna, for Ladies' Breasts	1	Diam. 6½ in.	5 4	4 0
ditto	2	" 7½ "	8 0	6 0
ditto spread on Chamols ..	1	" 6½ "	8 0	6 0
ditto ditto ..	2	" 7½ "	12 0	9 0

PLAISTERS, SPREAD.—Prices per Dozen Yards. 16 Inches in width.

NAME	Glazed Cloth	Unglazed Cloth	Linen	Swans-down	Mole-skin	Skins of Leather
Emp. Aohasivum Opt. ...	4/0	5/6	10/0	10/0	20/0	4/0
" Adhasivum	3/2	..	..	..	..	..
" Ammon. c. Hydrarg ..	16/0	..	..	80/0	36/0	5/8
" Antim. Pot. Tart. ...	10/0	..	..	24/0	30/0	4/0
" Belladonna	13/3	15/0	24/0	24/0	30/0	5/8
" Calefaciens	5/8	6/4	11/3	11/3	22/6	..
" Cerat Saponis	6/6	7/6	12/0	12/0	22/6	..
" Dreadnought	9/0	10/0	14/0	14/0	24/0	4/3
" Elemi	9/0	10/0	14/0	14/0	24/0	4/6
" Ferri	14/0	..	..	24/0	30/0	4/8
" Galbani	14/0	15/0	18/0	18/0	27/0	4/8
" Hydrarg.	16/0	..	..	30/0	36/0	5/6
" Iodine	18/0	20/0	27/0	27/0	36/0	5/6
" Picis Co.	11/0	12/0	15/0	15/0	24/0	4/3
" Plumbi	5/6	6/6	12/0	12/0	21/0	4/0
" Potass. Iodid.	16/0	..	..	30/0	36/0	5/6
" Resinae	5/6	6/6	12/0	12/0	21/0	4/0
" Roborans	5/0	5/8	10/0	10/0	20/0	..
" Saponis Alb.	5/6	6/6	12/0	12/0	21/0	4/0

HOSPITAL PLAISTER, on Black Cloth, 16 in. wide, doz. yds. 8/0
 " " on White " " " 8/0
 Every other description of Plaster used in Pharmacy or Private Formulæ
 spread on any material, to suit any climate.

MANUFACTURED BY W. MATHER,
DYER STREET, HULME, MANCHESTER, ENGLAND.

PRICE LISTS SENT ON APPLICATION.

London Wholesale and Export Agents: Messrs. MACE & HALDANE, 77 Milton Street, London, E.C.

1886. TWENTIETH SEASON.

THE LUNG PROTECTOR

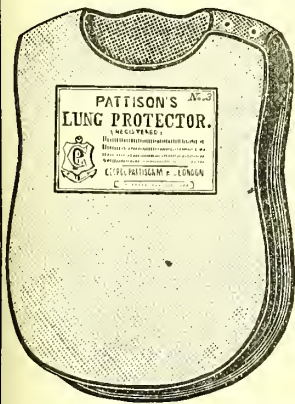
(REGISTERED).



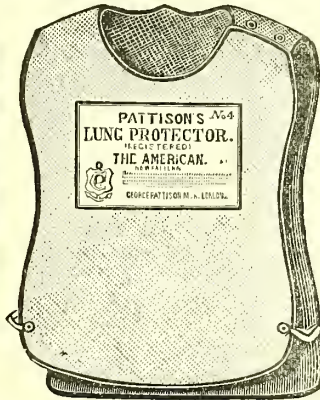
“An Article of Acknowledged Excellence.”

The “LUNG PROTECTOR” continues to be made only from the same Fine Soft Wool which has always been used since its introduction, 20 years ago.

Chemists are respectfully cautioned against imitations made from lower quality Wool, although sold as “Best Felt.”



THE
LUNG PROTECTOR.
ORIGINAL PATTERN.



LUNG PROTECTOR.
THE AMERICAN.



LUNG PROTECTOR.
THE CANADIAN.



CHEST PROTECTOR.

PRICES:

	No. 00	No. 0	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	No. 7
Original Pattern, Nine sizes...	10/-	14/-	18/-	28/-	34/-	42/-	52/-	60/-	70/- per doz.
The American, Seven sizes	—	—	20/-	28/-	38/-	44/-	54/-	62/-	72/-
The Canadian, Seven sizes	—	—	22/-	30/-	40/-	50/-	60/-	70/-	80/-

FELT CHEST PROTECTORS.

	No. 00	No. 0	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	No. 7
Nine sizes	4/-	6/-	8/-	10/-	12/-	16/-	20/-	24/-	28/- per doz.

All in Scarlet and White, and made in same Wool as the “Lung Protector.”

Terms: All Wholesale Houses either allow a large Discount for Cash, or quote the goods at Reduced Net Cash prices.

FELT CHEST PROTECTORS, C QUALITY, single and double, each in five sizes.

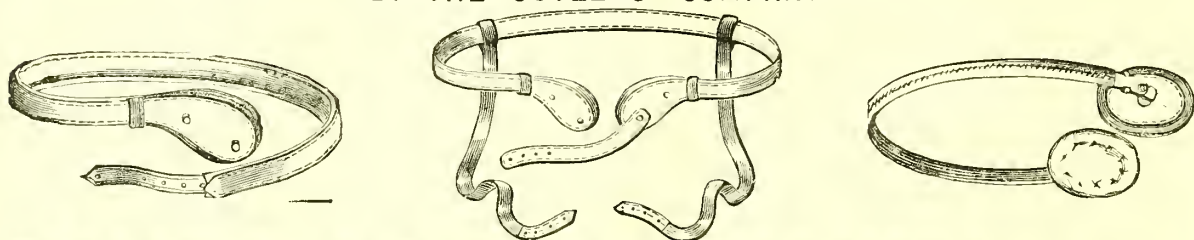
At lower prices than above, and equal to **BEST** of other makers, but are not recommended.

GEORGE PATTISON,

INVENTOR AND MANUFACTURER,
139 ST. JOHN STREET ROAD, LONDON, E.C.

BAILEY'S TRUSSES are the Best for Shape & Quality.

AWARDED FIRST PRIZE (SILVER MEDAL) IN OPEN COMPETITION
BY THE CUTLERS' COMPANY.



BAILEY'S ELASTIC STOCKINGS, ETC.,

WARRANTED TO STAND ANY CLIMATE.

WHOLESALE MANUFACTURERS AND EXPORTERS.

SHIPPING TERMS AND PRICES ON APPLICATION TO

W. H. BAILEY & SON,
38 Oxford Street, London, W.

Telegrams—
"LINT LIVERPOOL."

THE
LIVERPOOL PATENT LINT CO.,
MARK ST. MILLS,
NETHERFIELD ROAD NORTH,
LIVERPOOL.

LINT. MANUFACTURERS OF
FLAX, & COTTON,
LINTS,
ABSORBENT, AND CARDED,
COTTON WOOLS,
ABSORBENT, OPEN WHITE, and GREY,
BANDAGES,
SURGEON'S, AND CARBOLIZED
TOW.



F. SCHUTZE & CO., MANUFACTURERS AND IMPORTERS.

Patentees of the "UNBREAKABLE ARTIFICIAL EYES OF CELLULOID."

SPECIALITIES IN:—

Vulcanite-mounted Glass and Ball Syringes,
INJECTION BOTTLES,
ENEMAS, SYPHON DOUCHES, TEATS,
Tubing Thermometers, Clinical and others,
Medical and Perfume Spray Diffusers in great variety.



FRENCH AND AMERICAN SPECIALITIES.
French Fancy Sponge Bags and Bathing Caps.
IMPROVED SUSPENSORY BANDAGES.
ELECTROPLATED SURGICAL GOODS.
HYPODERMIC SYRINGES
IN GREAT VARIETY.

WE WARRANT ALL OUR GOODS.

Our Prices are the Lowest.

Special Quotations to Wholesale Buyers and Shippers.

WRITE FOR PRICE LIST.

9 SOUTH STREET, FINSBURY, LONDON, E.C.

MENTHOL PLASTER.

That the deeper tissues can be influenced by applications to the skin is well known to all, and with the development of medical science this fact is being taken advantage of more and more.

Menthol is a "stearoptene obtained by cooling the oil distilled from the fresh herbs, menthæ. It has the odour and flavour of peppermint, producing warmth on the tongue, or if air is inhaled, a sensation of coolness."

Applied externally, menthol acts as a rubefacient, and exerts a marked medicinal action as well. It thus bestows a two-fold advantage, and is most valuable aside from its simple cutaneous action.

Menthol has a soothing, quieting influence upon the motor, sensory, and reflex centres in the brain and, spinal cord, thus lessening irritability; it is, therefore, in the form of a plaster a most useful medicament in many nervous affections.



It is on account of the transitory effects of the ordinary modes of applying menthol that it is now offered in the form of a plaster. In this it is combined with medicinal gums, and produces an agreeable electrical sensation on application. When applied as an external remedy menthol is also a very powerful antispasmodic.

The next time you order Plasters get the Menthol Plasters. They are handsomely put up, look well on the counter, and are preferred by Physicians to the other Plasters which are used for the same purposes. They have attained greater popularity in a short time than any other Plaster ever introduced, are guaranteed to give satisfaction and sell well. They are not advertised in the newspapers, but, instead of this, circulars and printed matter are supplied to the Drug Trade, bearing the Chemist's name and advertisement. We are determined to make it to the interest of the Drug Trade to introduce these as a "leading line." Menthol Plasters are supplied by all wholesale druggists. For printed matter apply to

THE NATIONAL PLASTER CO., 67 HOLBORN VIADUCT, LONDON, E.C.

SUPPLIED BY THE WHOLESALE TRADE.

MENTHOL PLASTERS, with Racks.—1 doz., less than 3 doz., 7s. 9d.; 3 doz., less than 12 doz., 7s. 6d.; 12 doz., 7s. 3d. per doz. net, without Racks, 6d. per doz. less. **MENTHOL PLASTER YARD ROLLS.**—1 doz., less than 3 doz., 42s.; 3 doz., less than 6 doz., 41s. 6 doz., less than 9 doz., 39s. per doz. net.

SPECIAL TERMS FOR LARGER QUANTITIES.

Placed along the spine, menthol allays nervous excitement and tends to produce sleep; it has proved highly useful in spinal irritation. Headaches, whether due to overwork, irritability, excitement, exhaustion, or congestion, are all being largely treated by the leading authorities with a menthol plaster placed either on the forehead or the nape of the neck, or both.

Menthol has been said to have no equal in its speedy and effectual relief of neuralgic pains. In intercostal, facia, brachial, or other neuralgia, and even applied over the pit of the stomach for gastralgia, gastrodynia, it simply operates like a charm.

Perhaps the best means of application is in the form of a menthol plaster, which maintains a gentle, but continuous medication.

Menthol is also useful in irritable heart: one of the plasters should be applied over the pericardium.

Specialists in nervous diseases direct that for lumbago, sciatica, "cricks," tie, "stitches," rheumatic pains, and chronic rheumatism, a menthol plaster of liberal size be applied and worn continuously.

It is also very widely prescribed in muscular twitchings and cramps, in lameness, soreness, sprains, strains, and stiffness of the joints or muscles.

In painful affections of the thorax, wearing a menthol plaster over the sternum, and another between the shoulder blades, has been extensively commented upon with favour by the profession.

The menthol plaster is purely medicinal, and affords physicians a perfect means of maintaining the continuous action of one of the most valuable remedies in the pharmacopœia. Chronic painful affections otherwise only relieved for short intervals are by this plaster kept permanently free from pain.

Whenever for any cause a plaster is required, or when a pain is obstinate and hard to relieve, the menthol plaster will afford a grateful relief by a continuous medication that is hardly obtainable by any other means.

Note.—If the cloth stick to the plaster, slightly dampen, when it will come off easily. Keep in a cool place.

The Menthol Plaster is supplied in yard rolls, 7 inches wide to physicians at 4s. 6d. each, and is also sold by all chemists in single porous plasters (7 by 5) at 1s. 1½d.

CAUTION!

The word "VASELINE" is the Exclusive Property of the CHESEBROUGH MANUFACTURING COMPANY. It is registered as their TRADE MARK for their Emollient, Remedial, and other preparations of Petroleum, and cannot be employed with respect to any goods not manufactured by the Company.

ADDRESS—41 HOLBORN VIADUCT, LONDON, E.C.

A CONDENSED LIST OF BURROUGHS, WELLCOME & CO.'S PREPARATIONS

ANTIPYRIN TABLOIDS.	PURE TEREBENE (Burroughs).	BURROUGHS' CHLORIDE OF AMMONIA INHALER.
EUCALYPTINE (Burroughs).	TRYPSIN (Fairchild).	MEDICAL POCKET CASES.
ZYME (Extractum Pancreatis), Fairchild.	BEEF AND IRON WINE.	COMPLETE HYPODERMIC POCKET CASES.
ZYME TABLOIDS.	DIALYSED IRON (Wyeth).	ELIXOIDS.
COMPOUND ZYME TABLOIDS	HYDROBROM. CAFFEINE (Bishop's).	ABSORBENT COTTON (Lawton's)
PEPSIN IN SCALES (Fairchild).	(GRANULAR EFFERVESCENT.)	The KEPLER EXTRACT of MALT
PEPSIN TABLOIDS.	VOICE "TABLOIDS."	The KEPLER SOLUTION of COD-LIVER OIL in EXTRACT of MALT.
PEPTONISING POWDERS (Fairchild).	(COCAINE, CHLORATE OF POTASH AND BORAX.)	LANOLINE.
ARTIFICIAL SPONGES AND WOUND PADS.	TRADE "TABLETS." MARK.	MENTHOL PLASTERS.
	(COMPRESSED CHLORATE OF POTASH.)	
	STROPHANTHUS. VALOIDS.	
	HYPODERMIC TABLOIDS.	
	HAZELINE.	

DRAPER'S INK (DICHROIC)

THE NEW BLACK INK, different from anything else ever produced. Writing becomes a pleasure when this Ink is used. It has been adopted by the principal Banks, Public Offices, and Railway Companies throughout Ireland.

It writes almost instantly full black.

Does not corrode Steel Pens.

Dries rapidly on the Paper.

Is cleanly to use, and not liable to blot.

Flows easily from the Pen.

Blotting-paper may be applied at the moment of writing.

In Jars, 6d., 1s., and 2s. each.

Can be obtained, in London, through Messrs. BARCLAY and SONS, Farringdon Street; W. EDWARDS and SON, 157 Queen Victoria Street, E.C.; F. NEWBERRY and SON, Newgate Street; S. MAW, SON, and THOMPSON, Aldersgate Street; HAYDEN and CO., 10 Warwick Square, Paternoster Row; HOVENDEN and SONS, City Road; AYRTON and SAUNDERS, Duke Street, Liverpool; GOODALL, BACKHOUSE and CO., Leeds; JNO. HEYWOOD, John Dalton Street, Manchester; JAMES HEMINGTON, 6 Moor Street, Birmingham; HENRY HODDER, Broad Street, Bristol.

BEWLEY & DRAPER, Limited, DUBLIN.

See "CHEMIST AND DRUGGIST," December 15th, 1874.

THE BEST PARAFFINUM MOLLE, B.P., IN THE MARKET IS "PETROLINA."

PURE, SWEET, NEUTRAL, NON-OXIDISABLE, UNCHANGEABLE.

Determined to give every possible inducement to the Consumer, the BINGHAMTON OIL REFINING CO. have authorised

A STILL FURTHER REDUCTION IN PRICES.

So that Petrolina is now as cheap as any of the inferior jellies.

Packed in oak kegs of 112 lbs., 56 lbs., and 28 lbs.; also tins of 14 lbs., 5 lbs., and 1 lb.; and in casks of 2 cwt. and 3 cwt.

SAMPLES AND PRICE LISTS FREE ON APPLICATION TO

E. A. DE PASS & CO., SOLE AGENTS, 3 COLEMAN STREET, LONDON, E.C.



ESTABLISHED 1859.

PRINCIPAL OFFICE, 42 CANNON STREET, LONDON, E.C.

BRANCH OFFICES:

NORMANBY CHAMBERS, MELBOURNE,

AND

41 TEMPLE COURT, NEW YORK.

Published every Saturday.

Subscription 10s. per year, payable in advance;
commencing from any date.

Post free to every country in the world. Single copies, 4d. each.

Supplied only to persons connected with the Trade.

For Australasian subscribers the subsidiary journal THE CHEMIST AND DRUGGIST OF AUSTRALASIA is included.

Literary Contents.

	PAGE		PAGE
Bankruptcy Reports	705	Foreign and Colonial News ...	715
Correspondence:—		French Pharmaceutical News ...	713
Pharmaceutical Society v.		Gazette	697
Widows; Linimentum		Leaderettes	710
Terebinthinae; Curious		Metropolitan Reports	694
Potassium Chlorate	719	North British Branch Meeting	697
The Proposed Curriculum;		Obituary	707
Effects of Light on Vegeta-		Personalities	707
tion; The Position of Cod-		Pharmaceutical Education. By	
liver Oil	720	Thomas Barclay	698
Analysts and Analysis; Jury		Pharmacopœia, The British ..	712
Service	721	Practical Notes and Formulae ..	714
Hop Bitters Prosecution;		Provincial Reports:—	
Prescribing Chemists	722	Bedford	694
American Musk; Practical		Buxton; Carmarthen; Down-	
Notes, &c.	723	patrick; Hull	695
Legal Queries	724	Hilfrcombe; Liverpool; Ply-	
Dispensing Notes; Miscel-		mouth; South Shields;	
laneous Queries	725	Stourbridge	696
Information Wanted	726	Scottish News; Aberdeen; Ar-	
Editorial Notes:—		broath; Edinburgh	696
The Pharmaceutical Council		Trade Marks Applied for	706
and Widows	708	Trade Notes	707
Reports on the Pharmacopœia		Trade Report:—	
Mr. Barclay's Educational		Mincing Lane	716
Scheme	710	New York	718

ADVERTISEMENTS of employers and assistants can now be received by us up to the first post on Friday mornings, and will be inserted in the current week's issue.

READING CASES.—Please note: We cannot continue to deliver these to City houses for enclosure. We find so many of the wholesale firms careless about enclosures, and this leads to so much troublesome correspondence and double work, that we have decided to supply these reading cases only to purchasers in the office at 1s., or by parcels post at 1s. 3d.

THE CHEMISTS' AND DRUGGISTS' DIARY FOR 1887 should be delivered to all subscribers within a few days of this notice. The copies will be delivered throughout the United Kingdom either by Sutton or by Parcels Post, and in no case should any charge be made. If any of Sutton's agents demand any payment, subscribers will please pay it, take a receipt, and send this to us, when the amount will be refunded. To subscribers whose term of subscription expires with November the Diary will be sent immediately on renewal. We are aware that the large majority will renew their subscriptions, but it would confuse our books too much to make exceptions, so we must ask them to excuse this day or two's delay.

POST CARD COMPETITION No. 8.—Subscribers and their assistants are reminded that the period for sending in details of chemical experiments expires on the 30th inst. Parti-

culars of this competition will be found in recent numbers. The five guineas suggested will be awarded.

THE SCOTTISH MEMBERS of the Pharmaceutical Society had a meeting this week, a report of which will be found in our Provincial News. It appears to have been a very tame affair, and the meeting agreed without enthusiasm to the Council's resolutions.

THE MEDICAL COUNCIL have sanctioned the appointment of Professor Atfield, F.R.S., as Reporter on the British Pharmacopœia. He will prepare annual reports of pharmaceutical work bearing on Pharmacopœia processes, and these will furnish material and references for a future revision.

THE SHOP HOURS BILL.—The voting-papers issued with our last number are not being returned so freely as we could wish. We were urged in many quarters to canvass the trade on the subject, and it is to be hoped that we shall get a fairly full expression of opinion. Subscribers will find that the journal will not be injured by the removal of the sheet on which the voting-paper was printed. We were compelled to page it on with the other matter to satisfy the officials of the Post Office. Chemists will much oblige by sending us their votes either for or against the Bill; or they may send the paper back blank, but signed, to indicate neutrality.

MR. THOMAS BARCLAY, as President of the Midland Counties Chemists' Association, has made the speech of the week in pharmaceutical history. He has with much industry compiled from first-hand sources a *conspectus* of the condition of pharmaceutical education in the provinces, which is not cheering; and, based on a consideration of the circumstances of the trade, he has drawn out a scheme for a sort of home-rule curriculum, which he puts in competition with that of the Pharmaceutical Council. It will be recognised that Mr. Barclay has placed before chemists the framework of an excellent method for training apprentices, which may be adopted voluntarily at once with much advantage. But he skims lightly over the question, which he nevertheless begs, whether the enforcement of his own or any other scheme is worth agitating for at the present time.

DIARY FOR NEXT WEEK.

Monday, November 29.

Public sales of cinnamon, at the Commercial Sale Rooms, Mincing Lane, at 11 A.M.

Society of Arts, Cantor Lecture, on "Principles and Practice of Ornamental Design," by W. L. Foreman Day.

Tuesday, November 30.

Public sales of drysalteries, at the Commercial Sale Rooms, Mincing Lane, at 1 P.M.

Public sales of cinchona bark, at 6 Mincing Lane, at 1 P.M.

Wednesday, December 1.

Public sales of spices, at the Commercial Sale Rooms, Mincing Lane, at noon.

Chemists' Assistants' Association, 103 Great Russell Street, W.C., Dr. H. Macnaughton Jones on "Pasteur's work in relation to Zymosis and Antiseptics." Chair at 9 o'clock.

Society of Arts (ordinary meeting), Discussion on Dr. C. Meymott Tidy's paper (read last session) on "Sewage Disposal."

Thursday, December 2.

Public sales of varnish gums, at the Commercial Sale Rooms, Mincing Lane, at 11.30 A.M.

Public sales of acacia gums, at the Commercial Sale Rooms, Mincing Lane, at 2 P.M.

Linnean Society of London, Burlington House, W., meeting at 8 P.M.—(1) On the Lochleven Trout, by Dr. Francis Day. (2) Herman's Ceylon Herbarium, and Linnaeus's Flora Zeylanica, by Dr. H. Trimen. (3) New species of *Brachyonychus* from Mergui, by Henry W. Bates.

Chemical Society at 8 P.M.

Metropolitan Reports.

THE PHARMACEUTICAL FOOTBALL CLUB met the Britannia in Finsbury Park on Saturday last, the match resulting in a draw, the P. F. C. having two goals and two tries to one touch-down. The club will meet the Dental Hospital team on Primrose Hill to-day.

FIRE IN A PHARMACY.—On Friday evening, November 19, a fire broke out on the premises of Mr. W. J. Williams, chemist, 123 Cannon Street. The front basement with the contents were damaged by fire and water, and the upper part of the house and stock were also damaged by smoke. The cause of the outbreak is unknown.

MILK AND NOXIOUS GASES.—At the Guildhall, on Friday, Leon Napoleon Loab was fined 5*l.* and 2*s.* costs for creating a dangerous nuisance in St. Michael's House, Church Passage, Basinghall Street, by allowing the escape of some noxious chemical effluvia (supposed to be nitrous oxide gas), whereby the goods of a neighbouring milk-seller were contaminated, and the public health endangered.

THE CHARGE AGAINST CHEMICAL BROKERS.—At the Mansion House, on Friday last, Mr. John Angus, a chemical broker, and Mr. Stephen Raphaelovitch, his manager, again attended before Alderman Sir Andrew Lusk on the charge that has been previously referred to. Further evidence was called on the part of the prosecution. Mr. Willis (for the defence) said that an account would be prepared by the defendants showing how the money had been applied, and in order that this might be done he asked for a further adjournment. Sir Andrew Lusk accordingly again adjourned the case.

THE HOP BITTERS COMPANY (LIMITED) v. DIGBY.—At the High Court of Justice (Chancery division) last week, an application was made for an injunction to restrain the defendant from publishing statements that the plaintiff company were not the original manufacturers of hop bitters, and from stating that the company had stolen the recipe—from, in effect, slandering the plaintiffs' title, and thus causing great injury to their business. Mr. G. Hastings, Q.C., and Mr. Swynfen Eady were for the plaintiff company. No one appeared for the defendant. Mr. Justice Stirling said the evidence was clear, and he would grant the order asked for until the trial of the action or further order.

A NEW AND DEADLY POISON (?)—At the Lambeth Police Court, on Saturday last, a female asked for assistance against parties who, she alleged, had threatened her. The applicant, who had previously made complaints, in the course of a conversation with the magistrate (Mr. Chance), said, "I have had an attempt made upon me to poison me. You may not have heard of a poison called 'Varieties.' (Laughter.) It is no laughing matter, I can tell you." Mr. Chance: What is this particular poison? Applicant: There is not one doctor scarcely that knows its deadly effects. A dose or two will bring on apoplexy, epilepsy, madness, prostration, consumption, and death. (Loud laughter.) Mr. Chance: A terrible mixture. Do you know any victims of its powers, or have you tried it yourself? Applicant: I have not tried it yet. Mr. Chance: I hope you will not. Mr. Chance directed inquiries to be made about the applicant.

POISONING WITH LAUDANUM.—On Tuesday Dr. Danford Thomas, coroner, held an inquest in Clerkenwell as to the death of Myer H. Myers, aged 50, a publisher, lately residing at 72 Petherton Road, Canonbury, who died on Saturday last. Deceased was to have been tried on Tuesday at the Middlesex Sessions for infringing the rights of the Exchange Telegraph Company. From the evidence it appeared that he had suffered from a heart complaint for six years, he was very nervous, and was in the habit of taking laudanum. A son of the deceased last saw his father alive on Saturday morning, when he appeared very dozy, but nothing wrong was suspected. Dr. John Bowie, of Grosvenor Road, said deceased was hypochondriacal. He was called to his house on Saturday night, but he had expired. Death was due to an overdose of a narcotic, probably laudanum. The coroner said it was only right to tell the jury the deceased had been in great trouble lately. It was for them to say whether he

took the laudanum accidentally or feloniously. Eventually the jury returned a verdict of "Death from misadventure."

THE CHEMISTS' ASSISTANTS' ASSOCIATION.—The annual conversazione and dance of this Association was held in the Portman Rooms, Baker Street, on Wednesday evening. The hour for assembling was seven o'clock; but, owing to the dense fog, it was fully an hour later before the majority of the guests arrived, and ultimately the assemblage numbered about four hundred ladies and gentlemen. In connection with the reunion an excellent, though small, exhibit of pharmaceutical novelties and relics had been got together by Messrs. Dymond and Saul, which was examined with much interest by the company. The exhibits, which also included microscopic demonstrations by Mr. J. F. Burnett, F.C.S., comprised a collection of new and rare drugs by Messrs. T. Christy & Co.; a series of fine chemicals by Messrs. Hopkin & Williams, amongst which were exceptionally fine specimens of gelsemine hydrochlorate, crystallised urea, hyoseyamine, &c.; a varied collection of drugs from the Pharmaceutical Society's museum; and photographic novelties from Messrs. Marion & Co. to illustrate the "new trade for chemists." The pharmaceutical relics were chiefly bibliographic, and contained, amongst other interesting items, the correspondence of Pereira with Guibourt; a curious chemist's bill (1685); "Catalogue of Druggs prepared by Silvanus and Timothy Bevan, in Plow Court;" Cost Price Book of Allen, Hanbury & Barry (1824); William Allen's Laboratory Calculation Book (1795); a table of weights and measures of date 1450; these with many others were lent by the Pharmaceutical Society. Mr. Joseph Ince contributed an original manuscript by Ambrose Godfrey Hanchwitz, Goulard's treatise on lead, &c. Several other gentlemen contributed to the collection, Mr. Saul showing autographs of leading pharmacists. The relics of ancient pharmacy commanded considerable attention. Amongst them was the large and elaborately figured bronze mortar which Louis XIV. presented to his apothecary, lent by Mr. J. Robbins; several beautiful and ancient apothecary's jars from Messrs. J. Bell & Co.; several of the same type from Professor Redwood; and a very old collection of materia medica specimens supposed to be of date 1700. These were enclosed in curiously-shaped small glass jars capped with parchment, and many of the drugs are in a good state of preservation. The collection was from the Pharmaceutical Society's museum. From eight to half-past ten an excellent programme of music and recitations was gone through in the concert-room, and was evidently greatly appreciated by the company. The singers were Misses Martin and Kirton, and Messrs. Bonetti, Myers, and Groome. Signor Luigi Ardit, jun., was pianoforte accompanist. The recitations were rendered by Miss Ince and Mr. Watson. At a quarter to eleven dancing was commenced to the strains of Mr. Fleet's band, and was kept up to an early hour. The reunion was a great success in every respect, and much credit is due to the committee—Messrs. Millhouse, Dymond, Strother, Saul, and Phillips (hon. sec.)—for the excellence of their arrangements.

Provincial Reports.

Items of news, and newspapers containing matters of interest to the trade, sent to the Editor, will much oblige.

BEDFORD.

THE POISONED BEER AND THE PUBLIC ANALYST.—A special meeting of the Bedford Town Council was held on Saturday last to consider the following letter from Dr. Stevenson, the analyst for the borough, to the Town Clerk:—

"45 Gresham Road, London, S.W., Nov. 15.

"DEAR SIR,—I was startled on taking up *The Times* of the 10th inst. to read therein a paragraph obviously relating to myself and an analysis of beer. My concern for my assistants who, with myself, taste these articles of food, and drink, as in duty bound, was great; and I regret to add that one of them is supposed to have been poisoned by tasting some of the beer in question last Monday. What is termed in a letter in *The Times* of Thursday a ridiculous proceeding has assumed

a very grave aspect, and what appears to have been conceived as a diabolical plot may prove to be a serious matter to others besides myself. I assume as a matter of course that the Food and Drugs Committee did not authorise the alleged trick. Into the circumstances under which the poison came to be overlooked (if I really received a poisoned article) I do not now enter; but I demand an explicit answer to the following questions:—1, The number of the sample of beer; 2, the name of the person who purchased it; 3, the name and address of the vendor; 4, the names of the persons giving instructions for the sophistication of the article; 5, the poison alleged to be added and its quantity; 6, whether the sample retained by the inspector has been submitted to further analysis (this should be done); 7, the names of those present when the sample was poisoned; 8, was the inspector aware of the trick when he delivered the sample to me? It may be necessary to take proceedings against those who have unlawfully used lethal weapons, or it may be that there was a fraudulent conspiracy.

"I am, dear Sir, yours faithfully,
"THOMAS STEVENSON."

After the reading of this letter an inquiry was held by the council, in the presence of Dr. Stevenson, and an animated discussion took place for two hours and a half. First, a resolution was passed requiring the inspector under the Food and Drugs Act to produce his memoranda of the transaction and the samples of the beer that he had retained. This having been done it was ascertained that the Food and Drugs Committee duly instructed the inspector to procure six samples of beer from public-houses to represent as many brewers, and the inspector stated that he purchased one sample at the house of Mr. Councillor Taylor, who is a member of the committee. He could not say that he actually saw the beer drawn, but the person who supplied it did not leave the room in which it was served, and he saw no mixture put in it, nor any attempt to tamper with it. In fact, he bought it in the ordinary way, and he denied that he had any knowledge whatever that the beer had been interfered with. The committee did not instruct him as to where he was to purchase the sample, but he had been requested by an individual to take a sample from Mr. Taylor's house. This statement was confirmed by Mr. Taylor. The inspector further said that he delivered the samples personally to Dr. Stevenson.

In reply to Mr. Taylor, Dr. Stevenson said he personally examined some of the samples, but he could not say whether he examined the one in question until he knew its number.

The certificates returned by the analyst of the six samples were read, and in the case of one numbered 1,394 it was remarked that there was an excess of chloride equal to $5\frac{1}{2}$ grains common salt per gallon; but the analyst did not recommend a prosecution as he had not the history of the water from which the beer was brewed. In each of the other five cases the certificates stated that no change had taken place in the constitution of the article that would interfere with the analysis, and this was followed by the words, "I am of opinion that it is a genuine sample of beer." Mr. Piper moved that the inspector be asked to divulge the number of the sample purchased at Mr. Taylor's house. Mr. Taylor strenuously opposed this proposition, but after considerable debate it was carried by ten votes to eight. The number was declared to be 1,899. It was then resolved that the sample in the possession of the Corporation be divided into halves in the presence of the Mayor, Dr. Stevenson, the Clerk to the Sanitary Authority, and Mr. Taylor: that one-half be sealed and kept by the Mayor, and that the other be taken by the clerk to Somerset House for analysis by an independent authority.

Dr. Stevenson pointed out that, assuming the sample had been added to, it was not necessarily an adulteration in the meaning of the Act. The Intoxicating Liquors Act (with which he had nothing to do) did prohibit the addition of certain substances to beer, but he was required to look for ordinary ingredients that were injurious to health. Very many poisons might be purposely added which would be of no advantage to the vendor, and might escape detection even after he had done all that he conceived to be his duty as a public analyst, unless an enormous quantity of beer was analysed, and a vast amount of time was occupied in the process.

The questions numbered 1, 2, 3, 6, and 8 in Dr. Stevenson's letter having been answered, it was decided that the remainder concerned Mr. Taylor alone, and were not for the Town Council to answer.

BUNXTON.

FIRE AT MESSRS. THRESH'S.—Early on Monday morning a fire broke out in the house occupied by Messrs. J. C. & A. Thresh, chemists, Spring Gardens. The servants and assistants, who slept over the kitchen, which is on the second landing, were awakened by a strong smell of fire. Proceeding downstairs they discovered the building filled with smoke, and the kitchen floor and walls in a blaze. Immediately under the kitchen is the laboratory and dispensing department, which contained inflammable liquids, and but for the promptitude of the fire brigade and a strong force of water the whole building would have been destroyed. As it is, the destruction of property was considerable from fire and water, two rooms being gutted. The building, which was only lately purchased by Messrs. Thresh, is fully insured. The damage is estimated at between 300*l.* and 400*l.* Two valuable dogs were suffocated, and the inmates had a narrow escape.

CARMARTHEN.

A CHEMIST POISONED.—An inquest was held here on November 18 on the body of Mr. J. D. White, chemist, Carmarthen, who died from an overdose of laudanum. Mrs. White, the widow, said deceased was forty-nine years of age, and they had been married sixteen years. From the second week in July to September 26 he was a teetotaler, but on that Sunday night he said that, feeling very weak, he took a little brandy. He had since then taken some more. On Monday morning before he got up—about 7.30—he complained of being unwell. About five o'clock in the evening, when he came in to tea, she noticed his eyes looked rather heavy, and he said he would not have tea, but would go upstairs to bed. In half an hour she found him sleeping very heavily, and as she failed to waken him she called for medical assistance. Her husband remained unconscious until eight o'clock on Tuesday morning. On Tuesday evening Mr. David Morris said to him jocularly, "What made you take opium?" Her husband replied that he had no recollection of anything, and said that if he had taken it he must have thought he was taking water with his brandy. D. W. Evans, an apprentice, deposed to missing from the bottle in the shop 1 or 2 oz. of laudanum on Monday evening. Mr. J. Rowlands, F.R.C.S., stated that he had attended deceased, and believed that death was due to nervous shock or a second absorption of laudanum. The jury found that death resulted from the effects of an over-dose of laudanum, accidentally taken.

DOWNPATRICK.

DESTRUCTIVE FIRE.—Early on the morning of Nov. 17 a fire broke out in Market Street, whereby the premises of Mr. Shields, apothecary, and other business premises were entirely destroyed, the damage exceeding 6,000*l.* Mr. Shields has lost his entire stock-in-trade, ledger, and prescriptions. He was insured in the Northern Insurance Company.

HULL.

SUICIDE WITH LAUDANUM.

The borough coroner (Mr. J. J. Thorney) held an inquest at the infirmary, last week, touching the death of Charles Hare, a fruiterer, who had died from the effects of poison.

Mr. Henry Preston, house-surgeon at the infirmary, gave evidence as to the condition of deceased when brought to the institution. He was in a comatose state from the effects of laudanum, and though various means were used for his recovery, he died about two days after his admission.

Charles Bush, employed as a chemist's assistant at 46 Waterworks Street, stated that deceased called at the shop and asked for sixpennyworth of laudanum to clean nuts. Witness said he never knew laudanum to be used for that purpose, and declined to serve him. Deceased then left the shop, returning about a quarter of an hour afterwards, and

now said that the laudanum was wanted for a horse, and witness served him. Deceased returned again about ten minutes afterwards, when he said to witness, "I have taken that stuff; will it 'croak' me?" Witness answered, "If you have been fool enough to take it you will 'croak.'" He went out to get a policeman, and meanwhile deceased escaped from the shop. He never saw deceased afterwards.

Corroborative evidence having been given, the jury returned a verdict of "Suicide while temporarily insane," and reprimanded the witness Bush for not using sufficient discretion when issuing the poison.

ILFRACOMBE.

ATTEMPTED SUICIDE.—On Friday, November 17, Emma Kennedy, a married woman, residing at Lee, near Ilfracombe, was charged with having attempted to commit suicide on the 14th by taking a certain liniment containing belladonna and laudanum. Mr. H. R. Foquett, surgeon, stated that on Sunday night he went to prisoner's house, where he found her in a semi-conscious condition, sitting in a chair, and it appeared to him that she was suffering from the effects of poison. He applied an emetic, which acted freely, and she eventually recovered. The liniment appeared to contain laudanum, belladonna, and camphor. After some further evidence prisoner was committed for trial at the Quarter Sessions at Exeter.

LIVERPOOL.

A DRUGGISTS' CONCERT.—The workpeople in the employ of Messrs. Evans, Sons & Co. last Tuesday held the first of a series of Social Winter Evenings for the present season, the chair being occupied by Mr. John J. Evans, one of the firm. The meeting was held in the rooms of the Young Men's Christian Association, Mount Pleasant, where about 250 of the workmen and workwomen assembled to listen to an excellent programme, consisting of instrumental music, songs, recitations, &c. Four songs in character, capably rendered by Mr. Arthur E. Evans, and the remainder of the performance by Messrs. Spring, Clegg, Hughes, Manley, Brinson, Jackson, and Shacklady, were listened to throughout with lively enthusiasm. The chairman in his opening remarks expressed his gratification at being present at a gathering so well calculated to foster right feeling and to encourage a spirit of kindness and mutual interest among those who had met together.

SUICIDE WITH CARBOLIC ACID.—Last Sunday night, Alexander Fraser Dick, aged 45, manager of a public-house in Athol Street, committed suicide by taking a glassful of crude carbolie acid.

PLYMOUTH.

STRANGE DEALINGS WITH POISON.

MR. T. C. BRIAN, the borough coroner, held an inquest on November 17, on the body of Charles Windeatt Bovey, rate-collector for St. Andrew's Ward, who had committed suicide that morning by taking prussic acid. Mr. Charles Edward Bean, surgeon, stated that he was called to deceased's residence at 520, and found him in an armchair quite dead, but still warm. At the request of the coroner he had made a post-mortem examination and found that although there was evidence of the evil results of alcoholism, he had no doubt that death resulted from the excessive amount of prussic acid which had been taken. Deceased's widow and other witnesses having given evidence which tended to show that he was overworked, John Hill (a chemist's assistant at Row & Co.'s, 84 Fore Street, Devonport) stated that on October 4 he sold half an ounce of prussic acid to Mr. G. M. Trevaskis, a chemist and druggist, who wanted the poison to destroy a dog. Mr. Trevaskis was not employed at an establishment, but he used to be in business in Union Street. The sale was duly entered in a book according to Act of Parliament. They rarely sold the poison at all. They supplied Trevaskis with various kinds of medicine.

Several jurymen were of opinion that Mr. Trevaskis should be examined as a witness. The Foreman said one of the jury would be able to prove that Mr. Trevaskis had stated that he gave deceased prussic acid.

The Coroner said if that was the case he would examine the juror.

John Argall Batten: I know Mr. Trevaskis, the chemist, very well. He came into my shop to-day. He referred to the death of Mr. Bovey, and said he supplied him with some prussic acid some time since to poison a dog.

John Hill, recalled, was further examined as to whether Trevaskis was entitled to sell the poison.

Mr. Gray said that Mr. Trevaskis, a chemist, had got a poison supplied to him because he was a chemist, and surely he had no right to dispose of it to a third party without there being an entry in his book that he had done so.

The Coroner: It is not our province to inquire into that. We can only censure him for having done such a thing, and if he has committed an illegal act it is the duty of others to take the case up.

The Coroner having summed up, the public (and the Coroner, at the request of the jury) retired, and ten minutes later the foreman announced that they had agreed "that Mr. Charles Windeatt Bovey committed suicide by taking prussic acid whilst in a temporary fit of insanity." The following rider was also brought in:—"The jury wish the coroner to caution Mr. Trevaskis from supplying such large quantities of poison to private persons."

The Coroner: But we have no evidence that he did supply a large quantity. Some of the prussic acid might have been taken out of the bottle between the time Mr. Trevaskis had it and his supplying it to deceased. If the word "large" is withdrawn I will communicate with Mr. Trevaskis.

The Foreman said the jury quite agreed to that suggestion.

SOUTH SHIELDS.

AN OVERDOSE.—At Westoe, on November 19, Mrs. Mary Green, widow of a banker, accidentally took an overdose of chlorodyne, from the effects of which she died in the course of the day.

STOURBRIDGE.

THE SHOP HOURS BILL.—The following announcement has been published by placard:—"Anticipating the 'Shop Hours Bill' coming into operation at an early date, and to prepare our friends for the change, we have decided to open our shops on Sunday in future in the evening only, from 5 to 6 o'clock, commencing on Sunday, December 5 next; and to close on Tuesday, Wednesday, and Thursday at half-past 8 o'clock from this date.

R. G. Jones.

G. Greenwood."

"November 23, 1836.

SCOTLAND.

ABERDEEN.

THE BALLS.—The Chemists' Assistants' and Apprentices' Association have resolved to hold their fourth annual ball this winter. They have declined a suggestion from the masters to amalgamate in this matter of dancing, "having found from experience that it is more enjoyable to have a separate ball." That decision, and the reason for it, shows that the masters in Aberdeen are still formidable rivals in a ball room.

ARBRATH.

CHEMISTS' APPRENTICES' AND ASSISTANTS' ASSOCIATION.—A meeting of this Association was held last week, when the following office-bearers were elected, viz., Mr. J. Robertson, President; Mr. J. Smith, Treasurer and Secretary; Mr. W. Jack, Librarian.

EDINBURGH.

A NEW CLUB.—The latest club which has been started in this city of old professional coteries is "The Innominato Club." Its object is to provide students of the university with the opportunity of securing in their studies the advantages which are commanded by co-operation. Edinburgh students have long enjoyed the benefits of social, literary and political clubs. The principal feature of the new one will be a conjoint system of note taking. A complete set of

notes of each professor's lectures will be arranged by competent workers, and copies of these will be multiplied and a permanent circulating library started. It is also proposed to institute a system of revival or tutorial classes, to be conducted by senior students, who have volunteered their services without salary.

DISPENSING CHARGES.—A firm trading as druggists at 49 Leith Walk, and understood to be unqualified, but of a "limited" nature, in announcing that they are prepared to dispense prescriptions, state that their prices range from 25 to 50 per cent. below those of the Edinburgh chemists' retail price list, and that their charges are strictly in accordance with the principles of the Edinburgh chemists' list, and are not based upon the cost of the ingredients, which may easily vary at the vendor's pleasure.

PRICES.—A meeting of chemists in business in Edinburgh and Leith, called by the local price-list committee, was held on Tuesday evening in the Pharmaceutical Society's house, York Place, for the discussion of questions relating to prices and relative matters. There was a large attendance, and the meeting was harmonious. None of the squalls which swept over the corresponding meeting last year threatened to upset the equanimity of this one. A few dissatisfied spirits spoke some hard words, but chiefly in regard to the apparently inoperative nature of the Pharmacy Act in certain quarters. The meeting, after some interchange of opinions, agreed to give the price-list committee certain discretionary powers to make some alterations and such reductions in prices as might be considered advisable owing to the present low market prices which ruled for many drugs.

THE NORTH BRITISH BRANCH AND THE PHARMACEUTICAL SOCIETY.—A meeting of the members and associates in business of the Pharmaceutical Society resident in Scotland was held in the Society's house, 36 York Place, on Wednesday afternoon, at two o'clock. The circulars calling the meeting were sent out by the assistant secretary, and were signed by Mr. James Watt, convener of the deputation which, at a previous meeting, had been appointed to confer with the Council in regard to Scottish affairs.

When the hour of meeting arrived about 20 gentlemen were in attendance, the following being present:—Messrs. W. Gilmour, Ainslie, Stephenson, Baildon, Clark, Mackenzie, Boa, Dott, Noble, Laird, Henry, McLaren, MacPherson, and J. R. Young, Edinburgh; Mr. Watt, Haddington; Mr. Storrar, Kirkcaldy; Messrs. Foster and Kinninmont, Glasgow; Coats, Leith; Coates, Edinburgh.—On the motion of Mr. AINSLIE, Mr. WATT took the chair, and, after the minutes of the previous meeting had been read and confirmed, he made a few introductory remarks regarding the object of the meeting. He expressed satisfaction at the courteous manner in which the Council had received the deputation. Having read several letters of apology from country members—mostly in favour of accepting the resolutions regarding the North British Branch—he asked Mr. Storrar, who had acted as secretary to the deputation, to read the report which the deputation had to submit in reference to their conference with the Council of the Society. The report stated that they had met the Council in a give and take spirit, which he thought had been fair on both sides. The deputation had not got all that it wanted, but nearly all, and in some things they had got more than they asked.

Mr. BAILDON gave a short *résumé* of the proceedings in the Council in regard to the negotiations.

Mr. MACKENZIE expressed his inability to comprehend the definition of the North British Branch as it was laid down in the resolutions, and he thought there should be something more explicit regarding the appointment of secretary. There was a want of logical lucidity about these two resolutions, and he could not accept them.

Mr. STORRAR said he sympathised with Mr. Mackenzie, but he was of opinion that if he waited till he got a logical settlement of the question he would wait till doomsday.

Mr. NISBET said he thought the resolutions of the Council should be adopted. The titles were the only thing really at issue, and it would be ungracious to quibble about them when their wants had been so fairly met in other respects. He thought there might be some inconvenience experienced from the combination of chairman and treasurer in one. It could be wise to have them separate. The treasurer would

need to be resident in Edinburgh. They might want to have a chairman from Haddington, or Kirkcaldy, or Glasgow, or any provincial town. He moved that the meeting adopt the deputation's report.

Mr. GILMOUR agreed with Mr. Nisbet's remarks. The smallness of the meeting was, he thought, an indication that there was a feeling of satisfaction in the trade. He had pleasure in seconding the adoption of the report.

Mr. J. B. STEPHENSON said he had no desire to divide the meeting, as it seemed to be favourable to the resolutions. He could not, however, see that the proposed arrangement would be any more legal than the former one. The Council had no power to delegate the performance of its duties. He deprecated the abolition of the terms "president" and "vice-president," which had existed for thirty years. The result was a degraded title. It was a wanton proceeding to abolish the old system, which, he said, had done good work; but he feared, in any protest which he might make, he was like a voice crying in the wilderness.

Mr. C. F. HENRY expressed dissatisfaction that the president and vice-president of the Society should be members of the Scottish executive *ex officio*, and he thought an effort should be made to retain the titles.

Mr. MACKENZIE submitted a motion (which was seconded by Mr. HENRY) to the effect that it was regretted that the Council did not see its way to grant a continuance of the titles "president" and "vice-president"; and that it be suggested that the executive have power to appoint a treasurer from their number other than the chairman, and also to nominate the Scottish secretary; but eventually

The following resolution (moved by Mr. NISBET and seconded by Mr. GILMOUR) was unanimously agreed to:—

That this meeting agrees generally with the resolutions come to by the Council of the Society as to the future management of the Society's affairs in Scotland, and thanks the Council for the time and consideration they have devoted to the subject.

A committee was then appointed, consisting of Messrs. Mackenzie, Dott, Nisbet, Henry, and Gilmour—Mr. Mackenzie to be convener.

Mr. MACKENZIE moved the re-election of the present board of examiners for Scotland.

Mr. HENRY seconded the motion, which was agreed to *unanimously*.

Mr. McLAREN moved a vote of thanks to the deputation.

Mr. BAILDON seconded this, and said he knew something of the trouble the deputation had had, and also the admirable way in which they had conducted their part of the negotiations.

A vote of thanks to the chairman terminated the proceedings.

Gazette.

PARTNERSHIPS DISSOLVED.

KEARNE, RICHARDS & Co., St. Helens, chemical manufacturers.

RODEN & FAYRER, Droitwich, physicians.

SHARPE, DRACUP & FLATHER, Bradford, mineral water manufacturers and manufacturing chemists.

TILLOTSON BROS., Burnley, druggists and drysalters.

FIRST MEETING AND PUBLIC EXAMINATION.

MARGETSON, JAMES FRANCIS, Halesworth, Suffolk, chemist and druggist and dentist. Dec. 3, Official Receiver's Office, Norwich. Nov. 30, Town Hall, Great Yarmouth.

ADJUDICATIONS.

MARGETSON, JAMES FRANCIS, Halesworth, Suffolk, chemist and druggist and dentist.

WATSON, JOHN DOUGLAS, Lurline Gardens, Battersea Park (late of Victoria Road, Battersea Park, and formerly of Cordeirus, Chalford, Gloucestershire), surgeon.

NOTICE OF DIVIDEND.

WITHERS, HENRY COOKE, Norwich and Heligra, Norfolk, drysalter. First and final div. of 4s. 1d., on and after Dec. 1. Mr. H. P. Gould's 8 King Street, Norwich.

PHARMACEUTICAL EDUCATION.

BY THOMAS BARCLAY.

[The following address on "Pharmacy in the Provinces, with special reference to Education," was delivered by Mr. Barclay, as president, at a meeting of the Midland Counties Chemists' Association, held in the Grand Hotel, Birmingham, on Tuesday evening. There were about sixty members present, in response to a special request, which asked for a large attendance, so that there might be obtained "an authoritative expression of opinion that might serve with others either to strengthen or stay the attempts of the Society's Council in regard to this matter of education." The address, as will be seen from the discussion, was very favourably received.]

I was only at the beginning of last year that we met to hear the admirable address of Professor Redwood: we were then making a fresh attempt to form classes under highly favourable conditions: a large number of students had presented themselves for tuition, and teachers of recognised ability were induced to undertake the work. We little thought that in so short a time we should have again to face the educational problem, but at the annual meeting recently held the teachers reported that the number prepared to enter the classes for the coming session was so small that they wished to take the opinion of the meeting as to whether they should continue their work. The matter was then discussed, and it was decided to leave it in the hands of the officers and teachers. We met together, and, after giving the question full consideration, it was agreed that I, as President of the Association, should bring the whole subject before you in the shape of an inaugural address.

In acceding to their wishes I knew that I was taking a very bold step, because so many able men had traversed the ground before me, notably Professor Atfield, who has made the subject his own, and whose services in the cause of pharmaceutical education cannot be over-estimated; the names of Mr. Carteighe, President of the Pharmaceutical Society, Mr. Greenish, and Mr. Schacht also, amongst others, deserve special mention. I felt that the subject was so hackneyed by its frequent discussion in the Council, and by the continued correspondence in the pages of the journals, that it would be difficult to say anything new or to throw any light upon it.

To gain as much precise information as possible, I issued to representative pharmacists in the most important centres of Great Britain a number of formal questions, asking for information as to whether they had any classes specially set apart for students of pharmacy; how long they had been established, and whether continuously; the qualifications of their teachers; the number that had entered for the present session; what fees were charged; and whether any subsidy was received from the Pharmaceutical Society, &c. One hundred and twenty-five papers were sent out, and 104 replies have been received. I wish to take this opportunity of thanking those gentlemen who have assisted me so readily at such short notice. Many of them did not confine their replies to the questions, but gave most useful information respecting the state of general technical education and of pharmacy in their district. The information so given I have made use of in the preparation of this address, for the question of education is so bound up with the condition of the chemist in business, that to consider the one it is absolutely necessary to think of the other. At this stage it is only fair, both to the teachers and students of our Association, to state that the miserable condition of the classes in Birmingham is not exceptional; for, in answer to inquiries, I can only find throughout the whole of Great Britain that about 240 students have entered classes this session for pharmaceutical education; consequently it is no use blaming either the one or the other. We must therefore look farther afield to discover the cause of failure.

PROVINCIAL PHARMACEUTICAL ORGANISATION.

From the 104 replies I find that, in addition to the large number of smaller towns and villages which were not communicated with—knowing that it would be useless doing so—there are 86 places out of the 104 at present devoid of special provision for pharmaceutical education, including Bristol, Oxford, Cambridge, Exeter, Hull, Northampton,

Brighton, Glasgow, Salisbury, York, Cheltenham, Norwich, Derby, Bradford, Bolton, Dover, Huddersfield, and Sunderland. In several of these towns attempts have been made from time to time to establish classes, which have been carried on spasmodically with more or less success, as the following letters, selected from others, illustrate:—

"In reply to your queries, our local association has been dormant for two or three years, but we intend to revive it this winter. Formerly we had a large membership, and went on flourishingly; but from many causes the whole collapsed, or rather became dormant. When there are a few men amongst the assistants who take a lively interest in the business things go on well; but, if these active men leave the town, or go into the ranks of masters, the attendance falls off. This has been the case with us on repeated occasions, but I hope that we shall have a revival with new men this time."

They seem, like ourselves, to have another crisis in their history, but, with Micawber, they take it very philosophically, and are waiting for "something to turn up."

Another says:—

"There was a class here for the purpose of helping apprentices and assistants some years ago; there was also a special room provided with a good loan library and apparatus, but it was found that very few of the persons for whose benefit it was established took any interest in it, and the affair entirely collapsed ten years ago. The collapse was entirely due to the indifference of the students to this means of education, for the fees were merely nominal."

Another says:—

"Our Association has existed for about twenty-five years. We meet yearly to elect officers to do nothing, and vote thanks to them for their services. Some eighteen years ago we established a reading room, fairly well supplied with periodicals and books. We also provided teachers to prepare the students for their examinations, for which we charged 7s. 6d. per annum, making up the deficiency out of the funds of the Association. This worked very well for the first year, and died before the close of the second. The assistants in the course of a few years took up the question, and for a while all went on regularly; but after two sessions, there could none be found to attend the lectures, and a meeting was called for the purpose of dissolving the Association and disposing of its property. I induced them to adjourn the meeting for two years, give up the room they occupied, and put the property in a place of safety. This was done, and last year, it being found impossible to cause any interest to be taken in the work, it was resolved to dispose of the property, and this has recently been done."

In some of these towns the apprentices and assistants take advantage of the Science and Art and other classes connected with public institutions.

Another correspondent writes, in answer to the question whether there were any classes for pharmaceutical students:—

"None; but there is, I believe, a good deal of scientific billiard-playing. It seems to me there is a tendency to leave everything to the universal postal and personal crammer who is so successful in working miracles upon the untutored brain."

In other places the condition of pharmaceutical education is generally at a very low ebb, although very much credit is due to the noble band of workers who, under the most trying circumstances, keep the light of education burning. In some places it will be noticed that fresh attempts have been recently made, and those engaged are, as we were last year very sanguine as to the result; but, without taking much credit to myself for being a prophet, I can safely predict that if the present condition of things continues, inevitable failure must follow sooner or later.

In one large Northern centre my correspondent writes:—

"Our local association has been in what may be called hibernating condition for some time past, and has only been kept alive by the determination of some half-dozen or so of us. We used to have lectures and classes in connection with our association, which for two or three sessions were fairly well attended, but soon became smaller and beautifully less. Classes are now carried on by private enterprise. We do not rent any premises at present, and have no laboratory."

At another the same condition exactly obtains, the teaching is now in the hands of a private tutor, but is partially under the control of the local chemists; the laboratory and rooms, however, do not belong to them. In Leeds the education is obtained through the Yorkshire College, Mechanics' Institute, and Literary Association, further assisted by Mr. Elborne, of the Owens College, Manchester; 17 students have entered this session.

In Sheffield the school has been revived. My correspondent says:—

"It is the second year of the School of Pharmacy. The teachers are Minor and Major men in business. We had a grant from the Pharmaceutical Society of 25*l.* last year. The fees are from 7*s.* 6*d.* to 10*s.* 6*d.* each for the entire course of eight months, or 30*s.* inclusive."

I feel personally interested in the account of the condition of pharmacy in Newcastle-on-Tyne, for it was there, when an apprentice, that I attended the classes then held by Mr. H. B. Brady, F.R.S., Mr. Barnard S. Proctor, and others. From Newcastle my correspondent writes:—

"The classes have been revived, and those now carried on have been established one year. The premises are rented at 32*l.* per annum. The laboratory is in the Durham College of Science. The teachers are pharmaceutical chemists. Ten students have entered for the present session; 26 last session. The fees charged are one guinea for each subject, and three guineas for the laboratory; 50*l.* has been received as a grant from the Pharmaceutical Society."

At Nottingham I hear the course of lectures and laboratory practice are in connection with the University College. The chemists have a room in which they have a library and a collection of materia medica specimens. Instruction is given there in materia medica and pharmacy by one of their own members.

At Owens College, Manchester, the authorities, on their own account, and "without the advice, request, or assistance of pharmacists," took up the subject of pharmaceutical education, and arranged a course of instruction to extend over two years, six months in each year, for day or evening classes; but the average attendance each year has been much below what was expected. The reason is said to be that the course is too elaborate. I believe this is the only provincial college of any note which has, by its own action, made special provision for pharmaceutical students.

From Edinburgh I hear:—

"At various times attempts to conduct, exclusively, pharmaceutical classes have been made both by the Council of the North British Branch and by private adventure, but they have not succeeded. The local chemists as such have nothing whatever to do with education. *Tutorial Classes* have been in existence continuously for about five years, but exclusively pharmaceutical ones for about two years. The premises of the society, including laboratory, can be used for pharmaceutical purposes by a teacher, and lecturers have ample accommodation. None of the lecturers in the School of Medicine are, or have been, pharmacists. By far the most successful classes are conducted by a pharmaceutical chemist, who is recognised by the University Court as a teacher of practical pharmacy, and whose certificates are accepted by the Senatus. His classes have improved rapidly, for many now avail themselves of *tutorial classes who used to study privately*, although the number attending classes in Edinburgh until within about two years ago rarely reached a dozen in all."

PHARMACY AS A BUSINESS.

Now, gentlemen, the picture of Pharmaceutical Education in the Provinces is before you. I have not attempted to describe the condition of the schools in London, for it is there that the students are driven by stress of circumstances, whether they like it or not, to be posted up in such a way as will enable them to get through their examinations, and Londoners are more highly favoured than the provinces, for they are not only provided with national picture galleries, parks, museums, &c., but they have abundance of public schools, libraries, and other advantages over the less fortunate citizens in the provinces. Now let us look for a few minutes at the business side of the subject; for, as I said before, the two are inseparable. It is hardly necessary to say to an

audience like this that both town and country business has depreciated to an enormous extent within the last few years; and my heart is often saddened when I think of the condition of men who, for a great number of years, have steadily attended to their businesses, supplied the public with good articles at moderate prices, and in every way conscientiously performed their duties—duties which, as chemists, we all know to be very onerous, through having to supply articles of a dangerous nature and at the same time to conform to the provisions of both the Pharmacy and Adulteration Acts. Large numbers of this class, who formerly made a reasonable livelihood, enabling them to maintain their families respectably, now find it almost impossible, despite unremitting attention to business, to keep the wolf from the door; and businesses which a few years ago, after the death of the owners, would have sold readily at a good price for the benefit of their families, could not now be disposed of except at auction prices. As a consequence, the number of chemists—in large towns especially—is continually diminishing. We in Birmingham know that several old-established businesses have been closed within the last few years, and the same thing obtains in other towns. This state of things is largely due to unfair competition on the part of co-operative stores, which, by a "fluke" in the Pharmacy Act, are enabled to carry on the business of a chemist and druggist, although none of the shareholders are qualified. It is also brought about by tradesmen in other businesses selling patent medicines, proprietaries, and packed goods (the latter being supplied by members of our own fraternity) at unremunerative prices, they being able to do this because it is a sort of "by-product" to them, any profit they may make being an addition to their ordinary trade; and if they get a fair rate of interest on the capital employed they are perfectly satisfied. There is in addition to these a large number of cutting druggists, who are making it still more difficult for the chemist to obtain a living by carrying on his business as formerly. We might have expected by this time that the number of medical men who dispensed their own medicines would have been lessened, but such is not the case; in fact, things may be said to be worse, for there is now an increasing number of open surgeries and provident dispensaries where the public may be supplied with medicine, and it has been said that probably not more than one-half of the chemists in the country make above 5 per cent. of their incomes by dispensing, and not more than 10 per cent. by the sale of articles to be used for medicinal purposes, exclusive of proprietary medicines. The following extracts from letters bear upon the trade aspect of the question, the first being from a leading chemist in a county town of the Midlands, who writes:—

"We have a population of 91,000; there are 33 chemists' shops, kept by three pharmaceutical chemists and 28 chemists and druggists. These employ 2 qualified assistants (Minor), 20 unqualified, and 5 apprentices. There are 42 medical practitioners in the town; all without exception supply their own medicines. We have one resident physician who does not care for practice, and only writes prescriptions occasionally. Years ago there were two or three physicians with very good practices, probably the railway facilities by which patients can consult physicians in larger towns and London may account for no one coming here. From the above you will understand that at the greater part of the chemists' establishments here there is no opportunity for practising the higher branches of pharmacy; consequently, there is a lack of interest and no encouragement to study."

And from the West of England my correspondent writes:—

"All that the Pharmacy Act does is to enforce examinations to enable a man to sell a few poisons. If there be a curriculum and pass-examinations, there ought to be another side of the equation, and protection from outsiders. What would a lawyer think if his privileges extended to 'murder cases' only, all the other legal work being open to the world? The chemists are in a very analogous position; as examined men we can sell poisons, but any other unexamined man can deal in all the medicines of the Pharmacopœia, and otherwise."

It will be seen by the foregoing that the chemist himself cannot have much pleasure in pursuing his calling, nor can the apprentice or assistant, under the present state of affairs, have much heart in prosecuting his studies and making the necessary sacrifices to qualify for the business.

REMEDIES FOR BAD TRADE.

I will now turn from the dark side of the picture and endeavour to make some suggestions by which our position may be improved. In the first place we must make up our minds that the old state of things is gone and never can return—I mean as regards the prices of patent medicines and sundries, and that it is impossible to take out of the hands of grocers and others the sale of ordinary drugs, and to prevent the oil and colour man selling all the ordinary medicines. We must look elsewhere for an improvement in our position. We must face the competition cheerfully, and, taking advantage of the knowledge gained at the expense of large advertisers who are continually testing the public taste, be prepared to supply the public with better articles at a lower price, for many of the advertisers are outsiders and know very little about the trade. We must be prepared to sell every day articles of commerce at moderate prices, for it is not to be expected that the public will pay higher prices to us than they will pay to others for articles which they themselves know to be identical. We must be continually endeavouring to meet the public requirements by bringing out new articles which in themselves are improvements upon what has been hitherto sold. These will vary, of course, according to the class of trade; in a low-class neighbourhood the requirements are altogether different to those of a better class of business, but the same rule obtains. I may give an example. One of my friends who has a business in a populous district where a "penny trade" can only be done is continually bringing out fresh articles to sell at from 1d. to 3d., and by this means he makes a good deal of money.

Then there is the manufacture of mineral waters, which can now be profitably conducted with a very small outlay of capital. This business is now largely in the hands of outsiders, who have no knowledge whatever of chemistry, and many uneducated men have made considerable sums of money out of it. At the same time there is no doubt the public would sooner purchase mineral waters made by chemists and druggists than by the class of men referred to.

Through the technical and science schools chemistry is becoming more and more used in developing manufacturing industries, and although many manufacturers employ their own chemists, yet numbers of others are now requiring technical and scientific help.

I hear from my friend Mr. Rimmington that in the Bradford Schools there are about 800 or 900 pupils, most of them being instructed in chemistry. "Fancy," says he, "the state of society in a few years if this goes on!"

But we do not intend to be left behind; and I hope one result will be that the Pharmaceutical Society before long will have a special examination by which chemists and druggists may become qualified for the post of public analyst. I think if this matter had been taken in hand earlier by the Pharmaceutical Society it would have been advantageous to the public as well as to us as a body, for at the outset the Government had great difficulty in finding men possessed of suitable qualifications for the work.

Then we must look forward to the time, and I cannot but think that if we but do our duty it is not so remote as many think it to be, when the bulk of the dispensing which is now done by the surgeons shall come into our hands. This is our legitimate calling. The Pharmaceutical Society was founded in 1842 for the purpose of educating men to undertake the work, and since 1863 no person has been permitted to enter the business unless he passed a specific examination, which, in the eye of the law, gives him the right to prepare and dispense medicines. Medical men are often blamed because they continue to dispense, but we must remember that to many of them we are thought to be interlopers. Their diploma entitles them to practise medicine and pharmacy, and we exist for the express purpose of doing away with what they consider a lucrative part of their rightful profession. I believe it is, however, neither to their interest nor to the public advantage that this state of things should continue, and I hope to have an opportunity by-and-by to show this to be the case. The best thing we can do to bring this about is to promote the higher education of the chemist and druggist: for it is only reasonable to suppose that whilst medical men are engaged in preparing themselves for medical practice they cannot possibly devote so much time to pharmacy as those who are specially engaged in the work; and, if we

steadily pursue a course of teaching and examination, there will be in a few years as much difference between us and the general practitioner as exists now between him and the by-gone apothecary; but from the unsatisfactory system of education which has hitherto obtained we have not made the difference so apparent as we ought to have done, when we consider the length of time in which pharmacy has been a distinct branch of the medical profession. This brings me again to the education question. It is acknowledged on all hands that in order to keep pace with the advancement of science in the public and learned professions, and, as pharmacists, to take our right position, we must alter our present system. It is, however, said by some that higher education and increased stringency of the examinations means preventing young men coming into the business. In reply, it may be said that it is to the interest of the chemist in business to keep others out, and it is to the interest of the assistants and apprentices now in the trade to keep others out; it can be no hardship upon those who have not entered the business for them to be kept out, and it is certainly to the interest of the public that chemists and druggists should be better educated.

EDUCATION AND EXAMINATION.

I will now, therefore, turn your attention to the present methods of education and examination, and then look at the curriculum which is sought to be imposed upon students, and after that submit to you a plan which I think will be more likely to meet with the approval of the trade, and be found much more practicable.

Professor Redwood, in his address to us, speaking of the present system, said:—

"As a teacher of some experience, I can state from observation that the demand for sound systematic education has been weakened instead of strengthened through the influence of compulsory examinations conducted without reference to the manner in which the knowledge to be tested has been acquired. . . . I should like to see classes established in every town where there are ten or a dozen druggists, and also an association of apprentices and assistants formed for mutual instruction in and beyond the subjects of the intermediate examination. There need be little or no expense incurred in carrying out such an object if the use of a meeting room could be obtained."

Mr. Barnard S. Proctor, of Newcastle-on-Tyne, says:—

"The more the examinations are split up and distributed over a period of study, the more advantageous will both examination and curriculum become. . . . Even an annual written examination would be advantageous to the student."

A gentleman who has had considerable experience as a teacher writes me:—

"From all that I have seen, I am strongly convinced that it is by means of *Tutorial Classes* rather than by lectures that the best results are to be obtained in the education of pharmaceutical students. This fact is getting to be rapidly recognised in other departments and systems. Tutorial instruction is being largely developed at the present time in connection with the University of Edinburgh. . . . The great mistake that seems to be made in 'getting up' classes for pharmaceutical students is that far too high a standard is aimed at to begin with. Something more humble and homely would probably meet the case much better and be attended with great success, and might ultimately develop into something more imposing."

It will be seen by the foregoing opinions (and others might be brought forward of the same character), in which I thoroughly concur, that the present system, if system it may be called, is not at all adapted to our requirements. I will now refer to the curriculum which has been adopted by the Pharmaceutical Council. It requires that before a youth is apprenticed to the trade he must have passed the Preliminary examination. He is then to serve not less than three years as an apprentice or pupil in the shop of a duly-qualified chemist and druggist. At the end of the three years, or, in the words of the scheme, "thereupon or thereafter," he is to submit to a written examination at one of the centres at which the Preliminary examinations take place, in pharmacy, pharmaceutical and general chemistry, and in the translation of prescriptions. This is to be a second or intermediate part

of the Minor examination. Afterwards, at an interval of not less than one year, he has to prove to the examiners that he has attended at college, school, or institute a course of lectures on chemistry, botany, and materia medica, and also a course of instruction in practical chemistry, and "thereupon or thereafter" he must be examined in botany, materia medica, chemistry, and practical dispensing. Now it will be seen that an apprentice from the time he enters the business until the three years have expired has no necessity laid upon him to study, and, therefore, if we are to judge from the present state of things—for we shall not by the curriculum alter human nature—we shall doubtless find that when this second intermediate examination is to be passed the apprentice will go to some "cram" school to enable him to get through his first technical examination. It will be seen that the next stage in the curriculum is a course of lectures in some central college or institute. The lectures are expected to take up five months of his time, the course of study is carefully elaborated in the curriculum, but no conditions are prescribed for the student other than that he must attend a certain percentage of the lectures. No certificate of the teacher is necessary to prove that he has been diligent in his studies, so that, after probably enjoying himself for five months, he is at liberty to present himself for the final pass-examination of the Minor at Bloomsbury Square. What do you think he will do to enable him to get through that examination? Why, what do you imagine? From our past experience of the student he will no doubt require the "cram" school again to enable him to pass; so that we shall have two "crams," five months' expenditure of time at some central college, a quantity of money wasted, and be very little better off than now in point of education. I will give you the opinions of gentlemen who have a right to a hearing in this matter. Mr. Luff says:—

"There is no evidence required to show that they have been benefited by attendance at lectures. There should be a certificate from the teacher that the student is fit to present himself for examination. The present state of pharmaceutical education is the Scylla, and I much fear that the compulsory curriculum without the insurance of thoroughness of work will be the Charybdis. The barque of pharmaceutical education may be rescued from the rocks only to risk its being engulfed in the whirlpool."

Prof. Redwood said at Birmingham:—

"I have sometimes been almost afraid that the prospect of the curriculum might in one respect do mischief through the influence of its formidable character; that it might deter some from studying in a less formal manner, on the ground that such informal study will not be recognised at the final pass-examination."

The Editor of the *Pharmaceutical Journal* says:—

"It is essential from the outset of their career, students should know, not merely what is necessary for their successful progress, but should also see before them a distinct and clearly-marked course of procedure to be followed in order to obtain the training and acquire the knowledge demanded of them."

EDUCATIONAL SCHEMES.

Then, again, as to the centres which will be available for the curriculum course, we had the benefit of a very able address lately in Birmingham by Mr. Greenish, President of the Pharmaceutical Conference, and he then, you will remember, showed us a map of Great Britain which was divided up, giving his idea of where such centres ought to be. The map, by the kindness of Mr. Greenish, is before you, and it will be seen that there are 12 centres for England and Wales and 3 for Scotland. Now this gives for England and Wales 1 centre to 4 counties, and for Scotland 1 to 11 counties; if there were colleges or public schools available in all such centres, it would entail a great cost upon all young men for their board and lodging for five months and for travelling such long distances; but it is a question whether, with the exception of the Owens College, there is a single public institution in the whole country which is prepared to make the requisite provision for teaching pharmaceutical students without being subsidised largely for the purpose. If we take the Mason College in Birmingham as an example, we have extraordinary advantages here with Professor Tilden, who

takes great interest in pharmacy, and who, being in entire sympathy with us, will do everything in his power to help us, and with Professor Hullhouse, who has on several occasions attended our meetings, and in other ways shown an interest in our proceedings; but they tell me that pharmacy could not be taught at the College unless a chair were endowed, and this would cost from 3,000*l.* to 4,000*l.* at least. But there are many places, as Mr. Greenish said in his address—namely, from the Thames to Portsmouth—where there is no public institution; nor is there anything for the Salisbury centre, nor for Devonshire or Cornwall. How is the money to be raised for this great scheme? I cannot see how it is practicable, and, finding so many grave objections to it, I have endeavoured to work out suggestions for a scheme which is of a much more humble character, but which, I think, if adopted, would better meet the requirements of the trade. If we carry our minds back to the time when we entered the business, we shall find that many of us took to it because we had a leaning towards the study of chemistry, and chemists are very familiar with the conversation which generally takes place when the parent or guardian brings a youth to be apprenticed. It frequently begins something like this:—

The parent says: "My son is very fond of chemistry; he is continually making experiments, and thinks he would like to become a chemist. He has got prizes for chemistry at school, and I want to know whether you have a vacancy." The chemist generally replies that there would be very little opportunity for his carrying on chemical experiments in the business, and explains what the nature of the business is, and the duties which the youth would have to perform. However, the youth is not to be prevented from following his bent, because he sees the bottles and coloured globes in the window, and there is an air of mystery about the thing which fascinates him. The result is, he comes to the business with very high expectations of pursuing scientific studies. But what happens? His shop work, as we know, consists of dusting, the use of the mortar and pestle, and when he gets on a little the packing of various common articles, and the ordinary routine work of the shop, which has no scientific bearing whatever; and it is only towards the close of his apprenticeship that he is called to dispense if there is any to be done. Now I take it that this is a great mistake, and it ought if possible in any curriculum scheme to be altered. I think the youth, from the time he comes to the business, should be introduced into some elementary science class, and undergo a curriculum, *commencing in his first year. By this means he would pass from his school work to the science class, and continue his studies without a break.* These ought to gradually extend, and by education and examination should culminate with his final examination for the Minor, unless, as would no doubt be the case oftener than now, he determined to take the Major. In case he entered for a four or five years' apprenticeship instead of three, it should be compulsory upon him to take the classes for the first two years of his apprenticeship, and the third course the year previous to his taking the Minor; there would thus be a break of one or two years; but there is little doubt that through the studious habits formed by his school training, and the two years of study after it, that he will continue a student even during the interim; and it should be considered the duty of his teacher to direct his studies during this period. We all know that it is no use giving general directions to a youth to study; if he is to succeed he must have work cut out for him—so many pages of a book to be learned, and a teacher to examine him upon it; and this scheme is consequently eminently more suited for training students than the curriculum. It is impossible to do more than give a general outline of the course of study; it will, however, be incumbent upon those who have the responsibility to isolate the first two years' course from the last year's, so that the student who takes the first two years successfully may be able without difficulty to take the final year's course, previous to his entering for the Minor. This could readily be done by making the first two years' course elementary, but covering the whole of the ground, and in the final year the whole of the subjects to be treated more comprehensively. It must, however, be borne in mind that the student will not always pass his examination at the first attempt, and it is not unlikely that many of them will have to study each year during the five to enable them to get through the examination; for

if they fail in one year it will be necessary for them to go back the one year in order to be ready for the next year's examination.

MR. BARCLAY'S SCHEME IN DETAIL.

In looking at this matter it would be well to see what is being done under the Science and Art system. During the year ending May, 1885, the report shows that there were in Great Britain 5,649 classes, 1,542 schools under teachers recognised by the Department. There were 78,810 individuals under instruction; of these, 48,497 came up for examination, and there were 37,133 successful. Now, why cannot we, on something like the same lines, set to work with Pharmacy students, and have a three years' course which will thoroughly cover the ground intended to be taken by the curriculum—that is, to include all the subjects necessary for the examination, and those which are to be taught during the college curriculum? The student will commence his studies when he goes to the trade, and have an examination at the end of each year, these examinations to be in writing, except the practical portion, and to be conducted in the provincial centres which are already used for the Preliminary examinations. The practical examination could be carried out on similar lines to those which are practised so successfully under the Science and Art Department. The course of study to be as follows:—

Comparative Table of the Curriculum Scheme and My Own. Holiday months, August and September.

Subject	Curriculum	Proposal
Theoretical Chemistry	60 lectures	30 lessons, of 1 hour's duration, each year, equals 90 for 3 years, as follows:— 1st year.—General elementary physics and the study of the non-metallic elements 2nd year.—Heat; metals and their salts 3rd year.—Light, electricity and magnetism, and organic chemistry
Physics	20 "	
Practical Chemistry	3 hours daily for 5 months, or 5 hours daily for 3 months, equals 360 hours	3 hours weekly each year of 10 months, equals 120 per year, or 360 hours in 3 years 1st year.—Preparation of gases; synthetic and analytical operation for all ordinary metals used in medicine and the arts, with preparation of a few typical compounds. Tests only for sulphuric, nitric, hydrochloric, and carbonic acids 2nd year.—Preparation of common acids and tests for all acidulous radicals, and analyses of unknown salts and mixtures of two acids and two bases. Study of the reactions of the rarer metals 3rd year.—Preparation, study, and identification of common organic compounds, and volumetric and gravimetric analysis. Much of this, especially those operations requiring time, can be done in the pharmacy, e.g., taking of sp. grs., distillations, microscopic examinations of starches, urine sediments, &c. BOTANY.—60 lessons of 1 hour's duration, or its equivalent, to extend over 3 years, equals 20 per year 1st year.—General sketch of the organs of plants and their variability; elementary structure to end of stems, equals 20 hours 2nd year.—The morphology and histology of the flower-stalk; inflorescence and parts of plianogamous flowers; kinds of fruit, ovule, seeds, equals 20 hours 3rd year.—Systematic, practical, and economic botany. Study of 26 common British natural order and indigenous medicinal plants, equals 20 hours. MATERIA MEDICA.—60 lessons of 1 hour's duration or its equivalent, to extend over a period of 3 years, equals 20 hours per year. 1st year.—Ranunculaceæ to Leguminosæ, equals 20 hours. 2nd year.—Rosaceæ to Aristolochiaceæ, equals 20 hours. 3rd year.—Euphorbiaceæ to end of animal kingdom.
Botany and Materia Medica	48 lectures of 1 hour 40 lectures of 1 hour	

Table—continued

Subject	Curriculum	Proposal
Pharmacy and Dispensing	No provision	10 lessons each year to be given on the first lesson-day of the month, equals 30 lessons during 3 years As Procter's "Pharmacy" comprehends the whole of the requirements, and as there are in it 29 sections, these may be taken as a basis and made into 30 lessons, to extend over the 3 years. Much of this, however, will have been alluded to in the chemistry and physics, with which this could be easily blended

Home Work.—Much may be done under this head. Work for dispensing in the pharmacy, such as the preparation of difficult pills, mixtures, and emulsions, as also the translation of prescriptions into English, and English into unabbreviated Latin. I would recommend that the student should give to the home work of each subject exactly the same amount of time as is specified for the lesson; that is, if the lesson is of one hour's duration the preparation at home should occupy at least one hour.

The above scheme briefly summarised is as follows:—The period of the curriculum is to extend over not less than five months, and in my scheme it is to occupy three years during pupilage. Theoretical chemistry and physics, according to the curriculum, are to take up at least eighty hours, and in my proposal ninety hours (thirty in each year).

Practical Chemistry requires three hours daily for five months, or five hours daily for three months; this is equal to three hundred and sixty hours. I propose to extend this over three years, giving one hundred and twenty hours each year, or three hours per week, excluding the months of August and September.

Materia Medica requires forty hours. I allow for this subject sixty hours, or twenty each year, or two each month.

Botany requires forty-eight hours. I allow sixty hours, or twenty each year, which is the same as the materia medica, and, finally, for

Pharmacy and Dispensing—for which no special provision is made in the curriculum teaching—I give thirty hours, which is equal to ten each year.

Periodical examinations by means of written papers and *visà voce* must be conducted by the teachers.

THE ANNUAL EXAMINATION.

It should be the duty of the Pharmaceutical Society by its examiners to issue an annual syllabus giving directions to the teachers as to the course of study and the text-books to be used; and it would be advantageous if the authors of the text-books were to divide them into sections to suit the three years' course. This the Pharmaceutical Society, aided by its experienced professors, could readily do. It would also devolve upon them to prepare the papers to be used in the annual examinations. It will be seen by the alternative scheme that very little time would be required away from business by the student during the three years. It amounts to only 200 hours in the year for classes, but as 120 of these are required for practical chemistry, based upon the curriculum scheme, eighty hours only will be required for the home work. But there is no doubt some additional time so spent would be advantageous; and, in addition to the work to be prepared for the classes, there would be some additional home work. This is of such a nature as could be done best in the shop; and it must also be noticed that, as the pharmacy lessons under the scheme are so disjointed and far apart, it would be absolutely necessary from time to time that recapitulation should take place to make them continuous, and the necessity for this should be enforced upon the teacher. Sacrifices will have to be made both by masters and students; but the master would be rewarded by the greater intelligence of his apprentice and regular study would keep him out of mischief. The student also would find the money and the time expended an excellent investment. The course I have sketched out would be homely, whilst the curriculum of the Pharmaceutical Council would take him from home and regular work and place him among a class of men, many of

them idlers, which would probably lead to his becoming dissatisfied with his business. From my knowledge of the country I know that the hours of business are very long in towns. In many cases shops are kept open until 9, 9.30, and 10 o'clock at night. In agricultural districts it is earlier; 8, I think, is the customary hour, and in the centre of large towns in the North of England is earlier still; 7 o'clock is, I think, the usual hour. In some places a custom has come into force within the last few years of closing one half-day during the week. I wish the shop hours could be generally shortened: they are much too long. The Shop Hours Regulation Act which came into force on November 1 prevents a young person under 18 being employed for a longer period in or about a shop than 74 hours (including meal times) in any one week. Earlier closing would greatly facilitate the work of education, and reduce the heavy strain upon chemists in business. By the scheme now proposed the local teacher would adapt the time for giving the lessons to the requirements of the district. In suburbs of large towns afternoons would no doubt suit best, while in the centre of towns the evenings would be preferred, and in country districts the evenings or the afternoons of quiet days.

TEACHERS AND MONEY WANTED.

Now in order to carry out the scheme we must have a great number of teachers, because it would never do for the students to have to travel long distances to attend the classes. I find there are 1,725 towns and villages in Great Britain in which chemists are engaged in business. We had, however, on the register on January 1, 1886, 1,581 pharmaceutical chemists (by examination), and 3,980 Minor men, making a total of 5,561, from whom the teachers could readily be found. I would suggest a modification of the plan adopted by the Science and Art Department, by which it is necessary, before a teacher can go to work, that he must have a local committee of five, one of whom is to act as secretary. I should say that if any examined Major or Minor man who desired to become a teacher could get five chemists to form themselves into a committee, and find a sufficient number of students to form a class, he should apply to the Council of the Pharmaceutical Society for permission to commence, and as the Council could not suffer loss by the experiment, permission should not be withheld unless in very special cases.

It may be urged as an objection that it is impossible for one teacher to take the whole of the subjects, but I find from the statistics which have been sent me that *the most successful classes, both in point of numbers and results, are those in which there is one teacher engaged.* In some cases he has assistants, but upon him is the responsibility. The subjects are all allied to each other, and there are great advantages in the students being under one teacher for all subjects. He becomes acquainted with each individual member of his class, and so can handle them much better than if he were one of a number of teachers.

I would have the local secretary of the district in which classes are held an *ex-officio* member of each committee, so that he would be "in touch" with all the committees in the district. The Science and Art Department pay one-half of the cost of apparatus for any laboratory, and the Pharmaceutical Society in this case should act similarly. I think the local committee would in all cases find the other half. I calculate that 15% to 20% would equip a laboratory such as would be required for the purpose. It would be necessary, no doubt, for teachers in a district to travel to several of the smaller places (I may say that this idea has been suggested by one of the gentlemen in a country district who communicated with me), or it might be arranged that the students should travel to meet him at some local centre; if the former, then the expenses of the teacher should be wholly met, or, as in the case of the Science and Art Department, a grant made towards them; they pay two-thirds second-class fare. As to the fees to be charged, I think these need be very moderate, for we have plenty of illustrations that there are numbers of men ready to teach for a small honorarium; but I think, whatever the fee is, it should be supplemented by capitation grants from the Pharmaceutical Society to the teacher for students who make the requisite attendances and pass the annual examinations. There might be two grades, first class and second class, and the grant should be more or less accordingly. The Pharmaceutical Society can well afford to

do this; they have by long discussions in the Council shown how earnest they are in the cause of education; this will, however, put them to a practical test. I notice that Mr. Borland stated in the Council in 1885—and, so far as I have seen, it has not been contradicted—that in seven years they cleared over 18,000*l.* for examination fees, being considerably over 2,000*l.* per year. I have no doubt a number of legitimate claims would reduce that amount; but still there is an ample surplus to enable them to deal very liberally with any teacher who might be set up under this scheme.

SWALLOWING A SURPLUS.

The number of students who pass the Preliminary examination every year is about 600, the number of those who pass the Minor something like 300, so that if the capitation grant to the teacher averaged 1*l.* for each student who passed the annual examination under him, it would not amount to a very large sum. I would publish the name of the teacher, the number of students who entered the classes, the number who presented themselves for examination, and the number and names of those who passed in the journals every year. By this means there would be a healthy emulation. I would also give to those students who passed certificates from the Pharmaceutical Society, and would present the most successful with prizes; it would not be difficult to obtain a number of prizes for the students. There is no doubt that there would be offers of prizes from Manchester, Newcastle, Sheffield, Liverpool, Bristol, and other towns; Birmingham, I feel sure, would not be behind in this respect; then there would be the Bell Scholarship and the Herbarium Medals to be competed for by students. It is impossible to go into every detail connected with this scheme, but I feel sure that if it were adopted we should raise up a class of students who would gradually advance the profession of pharmacy, and it would not be difficult before long to make the Preliminary examination include elementary science, and to make the three years' course of study more comprehensive. We should also by this system raise up a large number of well-trained teachers, for the successful men would be interested in their work and throw themselves more and more into it, whilst it would speedily weed out poor teachers, for the published results would discredit them, and the remuneration would be very small unless they were successful with their students.

I calculate by this scheme some 2,000 to 3,000 students would be constantly under scientific training. What a mine of wealth! In a few years we might possibly overtake the German and French, to whom we have now to look for the finer chemicals and alkaloids. I must now close, but cannot do so without expressing my great obligation to those gentlemen in various parts of the country who have so readily helped me with information and suggestions, and I would especially thank Mr. F. Harris Alcock, who has given me great assistance in working out the three years' course of education. I am greatly obliged to you for your patience and kind attention, and shall be glad of any criticisms or suggestions. I trust that the outcome of all our discussion here and elsewhere on this important question will result in a practical scheme which will prove well adapted to the requirements of the trade and the welfare of the public.

DISCUSSION.

Mr. PERRY: I think the thanks of the meeting are due to Mr. Barclay, and that he is to be congratulated on his scheme. We must eliminate from this discussion all considerations as to the value of pharmacy as a profession. To those who think nothing is wanted in the direction Mr. Barclay has indicated, the subject of pharmaceutical education cannot be of great interest; but we, who think that unless pharmacy has become degraded, unless it has become stuck fast in a morass of inevitable despair, consider a curriculum by the Pharmaceutical Society necessary. You, Sir, have dealt very satisfactorily with the subject you have discoursed upon, and it is clear that, unless pharmacy is to be pushed into the background, it must progress in the same ratio as other leading scientific professions. You have shown very clearly that the curriculum of the Pharmaceutical Council is inadequate to the needs of pharmaceutical students, for the simple reason that it leaves the pharmaceutical student three years entirely unprovided for; he gets out of the run of educational work;

and, when the necessity arises that he must put his shoulder to the wheel to get the necessary information, he must resort to the "cram" school. I think, too, you have shown that the scheme of Mr. Greenish is Utopian. With regard to your own scheme, I think I am warranted in saying that it will be gladly accepted by every pharmaceutical student throughout the land. I should have been glad of some such scheme when I was a student, and I think it will be received with acclamation by the majority of those for whom it is intended. I hope it will be brought under the notice of the Pharmaceutical Society, who, I hope, will give it their serious consideration. Minor details could be gone into after. I do not myself think that thirty lessons for pharmacy will be sufficient, but the broad outline will form a good basis on which to build a scheme. I hope we shall have the satisfaction of seeing at no very distant date Mr. Barclay's scheme inscribed on the statute books of the realm, and I have, in conclusion, the pleasure of proposing, "That the best thanks of this meeting be given to Mr. Barclay, and that in the opinion of this meeting the scheme proposed in the President's address is worthy of very serious consideration as an alternative scheme to the curriculum favoured by the Pharmaceutical Society."

Mr. CHURCHILL, in seconding the resolution, said that one very strong point for recommendation in Mr. Barclay's scheme was the frequent examinations, for there was no better method of testing a student's progress than examinations held from year to year. He found that those men who were successful were those who were always trying to learn and to improve themselves. There would be some difficulty in getting a lecturer to visit small places, but he hoped such difficulties could be overcome for the sake of the advantages which must result from a system of annual examination.

Mr. MACOR said he looked upon the curriculum as a means of killing a dying trade, and Mr. Barclay's practical scheme was one by which we should prevent such a result, for the young man would be educated from the moment he left school till he had passed his final examination.

Mr. DEWSON had to say an unpopular thing. If the curriculum were made compulsory it would be the same kind of system as obtained in France and Germany, and if it were so, the question was, should we not be equally protected? He was of opinion that the Minor man of to-day is sufficiently educated to sell poisons and dispense medicines. If the compulsory system were to be adopted the chemist of the future might reasonably expect extra advantages given to him. He would be put to greater expense, and something should be given as an equivalent. Where was this *quid pro quo* to come from? The Pharmacy Act of 1868 gave some hope of protection, but free-trade principles are so strongly implanted that it would be next to impossible to get the restrictions drawn closer round the trade of a chemist. Indeed, the probable result of further legislation would be to release the restrictions. As to the dispensing of medicines by chemists the great majority of the population are neither paupers nor hospital patients. While they do not care to go to the hospital they cannot afford to pay the doctor and pharmacist, and so long as this is so there is very little chance of dispensing being more in the hands of pharmacists. Believing there was no chance of a *quid pro quo*, he should not be prepared to support the curriculum. From July to July (last) he could only find seven cases in which the Pharmaceutical Society had taken legal proceedings against persons who had infringed the Pharmacy Act. This did not look like a serious intention or earnest endeavour to protect the pharmacist or the public. If a scheme did become necessary no better or more practicable one could be brought forward than the one they had just heard.

Mr. THONGER, whilst duly respecting the features of the scheme, so practical in its bearings, urged that no resolution be passed that night, but that the consideration of it be postponed till it had been published, so as to give chemists outside an opportunity to comment favourably or unfavourably upon it.

Mr. WAKEFIELD would like the scheme to go before the whole trade as soon as possible, with the knowledge that it had met with a favourable reception at a large meeting that evening.

Mr. WILLIAMS said the drug trade was in a bad condition, and not what a youth apprenticed to it anticipated. He considered that Mr. Barclay's was the best scheme which had yet been unfolded. He thought the Pharmaceutical Society

were a little asleep, and should be more practical instead of being so educational, and they were not in touch with the chemists and druggists as a body, as they should be. What advantage would a compulsory curriculum be to a youth when the trade was so much overrun with American specialities, &c.? Would it better help him to make up a prescription with half an ounce of Mr. Fellows's Syrup to be added to half a pint of water; or to affix a label of a wineglassful to be taken every morning to a bottle of Friedrichshall water? He thought something should be shown which was more remunerative to future chemists.

Mr. CHURCHILL asked if the gentleman who had just spoken was inside or outside the circle of chemists, and was met with the reply that he was a chemist and druggist.

Mr. ALFRED SOUTHALL said it seemed to be supposed that the scheme involved an increase of a young man's expenses, but it was not so; it was to lighten them by obviating the necessity of attending a London or other school.

Mr. HOLDSWORTH thought the resolution would be passed unanimously if the word "practical" were omitted.

The PRESIDENT said it was a question for the meeting whether the scheme proposed was "practical" or not, but he left it to the meeting.

Mr. HEALE, as a student, regretted that such a scheme as this was not in existence when he commenced his studies: had it been so, he would now have possessed much more knowledge and much more in his pocket.

Mr. MARSH JONES wished the Preliminary to be passed before apprenticeship, or the President's scheme to be amended. The medical men would not hand over their dispensing into the hands of the higher chemists (Major men), because of the bigotry shown. He believed that Minor and Modified men, and even unqualified men, were quite able to protect the public (as shown by the latter being allowed to deal in explosives), as well as those possessing the Major qualification could protect them.

Mr. THOMPSON said the scheme was on the right lines, and met with his approval.

Mr. BARLOW thought the scheme proposed by the President was more commendable than that proposed by the Pharmaceutical Society.

Mr. J. O. MORRIS (Walsall) begged to propose a vote of thanks for the President's able address, which met with his commendation.

Mr. GIBSON (Wolverhampton) begged to second it, and wished such a scheme had been in vogue in years gone by, then he would not have had to resort to the recognised "crammer," as he ultimately had to do. He hoped some such scheme would be carried out and taken up by students before it was necessary to become a recognised law of the land.

The PRESIDENT wished the resolution to be kept separate from the usual vote of thanks.

The resolution was then put and carried unanimously, after which the PRESIDENT returned the customary thanks, and took it for granted that something had been shown which was required, and that we must go forward, and not let the thousands of students throughout the land be left behind.

Mr. ALCOCK said if the number of promises given in to attend the classes were carried out, they would be able to go on at the earliest opportunity.

The PRESIDENT proposed, which was at once seconded, "That the formation of classes, &c., be left to the Council," which was carried unanimously.

Mr. THOMPSON stated that the next meeting would be held on December 2, and would take the form of a "social" meeting, to which he welcomed all present and as many others connected with the trade as could conveniently attend.

The meeting then dispersed, it being close upon eleven.

INDUSTRIAL ACTIVITY IN RUSSIA.—There are at present in European Russia 56,905 factories in working order, employing a total of 955,000 hands, and turning out products to the annual value of about 183,000,000*l.*, of which as yet only about 1,070,000*l.* are chemical products. But many works of this kind are in course of erection, and also manufacturing of dyewood extracts, ultramarine, cocoon oil, and palm oil refineries, &c. Backed by an excessive and ever increasing import tariff, these works will no doubt be able to defy foreign competition in their own market.

BANKRUPTCY REPORTS.

Re ALFRED ADDISON BLANDY.

THIS was an application to Mr. Registrar Giffard to close the bankruptcy, the debtor being described as a surgeon-dentist, of 58 Brook Street, Grosvenor Square. The failure took place in July, 1881, and the accounts show liabilities 1,084*l.* 18*s.* 0*d.*, against assets nil. Mr. Andrews, the trustee, appeared in person. In the absence of opposition by creditors the bankruptcy was ordered to be closed.

E. L. CLEAVER, Richmond, Manufacturing Chemist, &c.

THIS week Mr. Justice Cave, sitting in the Queen's Bench Division of the High Court of Justice, had made to him an application for a warrant for the arrest and committal of this bankrupt for non-compliance with an order of the Court below, made on July 14 last, on the day appointed for his public examination, *i.e.* that he should file a further cash and deficiency account for the three years prior to the date of the receiving order; also that he should amend his statement of affairs by inserting the names of creditors omitted; and, further, that he should supply to the trustee a list of the furniture claimed by his father and wife respectively. Mr. C. L. Roberts appeared in support of the application. After hearing the bankrupt's explanation, his Lordship said the point was that large sums of money were received by Mr. Cleaver after the dissolution of his partnership with Mr. Bucknell, the said sums having been brought in by succeeding partners. No account had been given of the disposition of these sums. The bankrupt replied that being out of business he had kept no books, and therefore was unable to say what had become of the money. He had filed very voluminous accounts, and more than that he could not do. His Lordship said the order must be complied with, and so far no attempt had been made to do it. He should order his committal, but would suspend the issue of the warrant for one fortnight, in order to give him an opportunity of doing as directed.

FAILURE OF A CITY SURGEON.

AT the London Bankruptcy Court on Nov. 15, a meeting was held before Mr. Registrar Giffard, for the public examination of Byron Blewitt, described as a surgeon of 120 Leadenhall Street. The receiving order was made on the debtor's own petition, on June 4 last, and the accounts since filed disclose liabilities 2,317*l.* 14*s.* 4*d.*, of which 2,274*l.* 1*s.* 4*d.* is expected to rank, against assets 653*l.* 10*s.* 1*d.* The debtor attributes his failure chiefly to losses upon the Stock Exchange. Upon the case being called, Mr. F. C. Willis said he believed the trustee was now satisfied as to the accounts, and would not further oppose the debtor passing his examination. A meeting was about to be convened for the purpose of submitting a scheme of arrangement to the creditors, and he should ask that the examination might be closed. Mr. Winslow, on behalf of the trustee, said he was satisfied with the debtor's accounts as now filed, and did not oppose the closing of the examination. The examination was then ordered to be concluded.

Mrs. KIMPTON, High Holborn, Medical Bookseller.

THIS case was before his Lordship this week on an appeal against the rejection of the trustee of a proof tendered by the bankrupt's son's wife for a sum of nearly 1,000*l.* lent by her, as alleged, for the purposes of the business. The hearing lasted several hours, but the facts may be briefly stated. Mr. H. B. Kimpton had entire control of the business, acting as manager for his mother, who received 4*l.* a week out of it, while he took more than 5*l.* weekly. He also had some speculations on his own account, having an interest in the *Weekly Medical Journal*, the *Medical Annual*, and "Surgical Handicraft," by Walter Pye, and for the purposes of these he kept no separate banking account, all moneys being paid into and drawn from the business bank account. He appears too to have betted on the turf on a somewhat extensive scale, and eventually the business, which certainly had been a good one, was brought to grief. On the part of the applicant it was alleged that the son borrowed his wife's money with his

mother's consent for the purposes of the business. On the other side it was alleged that Mrs. Kimpton, sen., had no knowledge of and gave no authority for the borrowing; that the cash was used for the son's private speculations; that by frequenting billiard-rooms and kindred resorts he neglected business and ruined its credit; and that he was indebted to it to the amount of nearly 3,000*l.* His Lordship held that the appellant had entirely failed to show that the money was borrowed with the mother's authority, or that it was put into the business, and he therefore dismissed the appeal with costs.

Re CHARLES WILLIAM LARGE, 203 Cornwall Road, Notting Hill, Dentist.

ON Nov. 18 a meeting was held, before Mr. Registrar Hazlitt, for the public examination of this debtor. The receiving order was made on October 11 upon a creditor's petition, and the statement of affairs filed by the debtor showed unsecured liabilities 408*l.* 3*s.*, against assets consisting of a pair of forceps, valued at 1*l.* The debtor attributes his failure to damages and law expenses incurred in an action for breach of promise of marriage in February last, and to his expenses having exceeded his profits. In reply to questions by Mr. Aldridge, the Official Solicitor, the debtor stated that he commenced business without capital. In February this year a verdict was obtained against him in an action for breach of promise of marriage. He had entered into an arrangement with a Mrs. Gordon, who bought all the furniture, &c., to pay her 300*l.* a year for the house and use of furniture. The arrangement was that he was to pay the money quarterly, but as a fact he paid it as it came in. The examination was ultimately ordered to be concluded.

Re ISAAC LIALTER, Junior, Hope Street, Glasgow, and London, Sponge Merchant.

AT the London Bankruptcy Court on Nov. 16, a meeting was held before Mr. Registrar Hazlitt, for the public examination of this debtor. The receiving order was made in September last upon his own petition, he describing himself as of Hope Street, Glasgow, and Mile End Road, London, sponge merchant. A few days prior to these proceedings a sequestration order was made against his estate in Glasgow; but he has subsequently petitioned for a withdrawal of that order, he having agreed to pay a composition of 4*s.* in the pound, payable within fourteen days of the confirmation of the resolutions by the Court, the larger portion of the assets being represented by the stock-in-trade in Glasgow. The unsecured debts are 1,234*l.* 17*s.* 10*d.*, and the assets 322*l.* 14*s.* 3*d.* In examination by the Official Solicitor, the debtor stated that he commenced business as a sponge merchant twenty years ago, and in September, 1885, he started a business in Glasgow, which was under the management of his son-in-law, Mr. Judas Leveine. At the time he started he had a capital of 2,000*l.* He had kept a day book and sales ledger, but he had not kept a cash or credit ledger. He had always paid regularly for everything that he had week by week. The books he had kept did not show whether he was solvent or insolvent. The rent of the Glasgow warehouse was about 20*l.* a year, but he knew very little about that business because it was managed by his son-in-law. His rent in London was 50*l.* a year. His indebtedness of 1,200*l.* had arisen through badness and depression of trade, and the expenses of his travellers, and his continuous ill health. Mr. Beyfus asked that the debtor should be ordered to file a goods and cash account for the four months preceding the receiving order. His clients were so large creditors for goods sold, he submitted that they were entitled to some information as to the sale of those goods and what had been done with the monies so received. Mr. Le Voi said that Mr. Beyfus's client had attended the first meeting and could have asked for further accounts, but had not done so. At that meeting a cash composition of 4*s.* in the pound was accepted, and he asked that the public examination should be concluded in order that the scheme might be carried through with as little delay as possible. The Registrar said he did not think that any good could result by keeping the matter open any longer. There was a very fair offer before the creditors, and to enable that to be carried through he should order the public examination to be concluded.

Re HENRY SAMPSON.

IN the Liverpool Court, on Monday, before Mr. Registrar Cooper, this debtor appeared, represented by Mr. Cornell, to pass his public examination. The statement of affairs showed assets 707*l.* 1*s.* 10*d.*, and liabilities 2,716*l.* 9*s.* 11*d.*. In answer to the Official Receiver, the debtor stated that he commenced business at 10 London Street, Southport, in 1859, as a chemist and photographer, with a capital of 550*l.* In 1863 he removed the photographing business to No. 11, on the opposite side of the street. He continued so till 1870, when, being in delicate health, and under medical advice, he sold his chemist's business for 1,200*l.*, and devoted himself to the photographing. In this, however, he had not been so successful as he anticipated, and various attempts to improve his financial position were failures. His house expenses were also needlessly heavy, and he admitted that he had not kept proper books of account. An adjournment was ordered for six weeks, the debtor to furnish a cash account since January 1, 1883.

JOSEPH TURNER, Hawarden, Manufacturing Chemist.

AT Chester County Court, before the Registrar (Mr. R. M. Preston), on November 18, this debtor came up for his public examination in bankruptcy. In reply to the Official Receiver (Mr. Evans) he said that he had carried on business on his own account at Queen's Ferry up to the end of August, 1884, and on September 1 in the same year he transferred the works to a company, feeling that he was not then in a position to carry on the works, as he had suffered some very heavy losses. He thought he should have been able to go on if trade had continued in the same state as it had been for some years previously. At the present time the products—coal-tar products for dyeing purposes—were not worth one-third what they were worth when he formed the company. On the formation of the company he was to have 12 per cent. on the actual profits, and he then calculated he would have been able to make 1,000*l.* to 1,200*l.* a year; instead of that he had received nothing at all. He was able to maintain himself and his family by the company allowing him to draw about 500*l.* a year. He had drawn altogether in this way 1,409*l.* 11*s.* 5*d.*, which had now become a debt to the company. A balance-sheet with reference to his position on September 1, 1884, showed a deficit of 4,461*l.* 10*s.* 10*d.*. To meet that he had a house in Curzon Park valued at 3,000*l.*, and 6,000*l.* worth of shares—800 shares at 7*l.* 10*s.* each—in the new company, not fully paid up; and furniture valued at 500*l.*. Four hundred of the shares were sold at 5*l.* each, and the remaining 400 were cancelled in consequence of his not being able to pay the calls upon them, with the exception of 135, which had been deposited as security with Messrs. W. H. Brown & Co., of London. The debtor then gave further evidence of the numerous losses he had sustained by contracts, &c. There were no creditors present to oppose or examine the debtor, and the public examination was declared closed.

Re FRANCIS WILLIAM WHITWELL, Thirsk, Chemist and Druggist.

THE examination of this debtor took place at Northallerton, on November 15, before Mr. Registrar Jefferson. The debtor commenced business in October, 1883, and it appeared that he had previously about the same date filed his petition, paying a dividend of 8*s.* 1*d.* in the pound, when his stock and fittings and part of the furniture were sold to Messrs. Hall & Pearson for a sum of 225*l.*, but he was still allowed to retain the use of them by paying interest amounting to 11*l.* 14*s.* a year on the money. He owed 306*l.* 8*s.* 10*d.*, and he estimated his assets, allowing 15*l.* for preferential debts, at 120*l.* 5*s.* 9*d.*, which made a deficiency of 186*l.* 3*s.* 10*d.*. The account books he kept were ledger, day book, trade ledger, invoice and cash book. He had never made a balance-sheet since 1883. His examination was adjourned till November 29.

WORMS IN THE LEG.—A customer called at a pharmacy in the Rue Grenelle, says a French paper. "Give me something to get rid of worms." "Yes; what kind of worms?" "They are in my woolen leg, and are eating it away."

TRADE-MARKS APPLIED FOR.

THE *Trade Marks Journal* publishes the following notice:—"Any person who has good grounds of objection to the registration of any of the following marks may, within two months of the date of this journal, give notice in duplicate at the Patent Office, in the form 'J,' in the second schedule to the Trade Marks Rules, 1883, of opposition to such registration." The address of the Patent Office is Southampton Buildings, London, W.C.

From the "Trade Marks Journal," November 24, 1886.

"LOVEWELL'S INEXHAUSTIBLE SMELLING-SALTS," other wording, and a sprig of "Mitcham lavender," on a label; for smelling-salts. By Thos. C. Lovewell, 8 St. Mary's Place, Brighton. 53,162.

A triangular design, with "Irish Hill Bauxite," and other wording, printed thereon; for an aluminous clay used in the manufacture of alum. By The Bauxite Co. (Lim.), Ballynare, near Ballyclare, Co. Antrim. 54,015.

"GODDARD'S SAUCE," other wording, and signatures of depositors, upon an oblong label; for a sauce. By George & James Goddard, 61 Jernyn Street, St. James's, Middlesex. 54,482.

"ADAMALE," for a non-alcoholic, non-aërated beverage (54,676), and for an aërated beverage (54,677). Also oblong label for same, of special design (56,634-5). By A. H. Waltonson & Co., Maude Villa, Harbut Road, London.

"PARKIN'S CLARET COUGH LINCTUS," on a circular label; for a mixture for coughs, &c. By G. A. Parkin, 11 Corn Market, Halifax. 54,824.

"FELL'S ALEXANDRIA RELISH," for a sauce. By Joseph Fell, 203 Horton Road, Bradford, Yorks. 54,929.

"LEVER'S SERVANTS' FRIEND TABLET," on an oblong label; for common soaps (55,134). "Automatic" and "Sundried"; for soaps (common and perfumed), candles, perfumery, &c.; and "Daylight"; for perfumery (including soaps, &c.) (56,435-6, 56,438, 56,441-2). By Lever Brothers, Warrington.

"WATKINSON'S LIQUORICE-TOLU," for a pharmaceutical preparation. By Wm. J. Watkinson, Hyde Street, Preston, Lancs. 55,347. Figure of a hand, with the word "Slip" upon the palm; for mineral and aërated waters. By E. Handslip, Cookson's Quay, South Shields. 55,362.

Fancy labels (oblong), with circular design in centre, enclosing a Maltese cross, wreath, &c., and "Lamplough's Pyretic Saline Aërated," and other wording; for a medicinal preparation and an aërated beverage (55,500-1). The same without the words "with lime-juice syrup"; for an aërated beverage (55,503). By Henry Lamplough (Lim.), 113 Holborn, London.

Coat-of-arms (stag's head below a star, and the motto *Regi semper fidelis*); for mineral and aërated waters. By J. M. Smythe & Co., Benington Hill, Liverpool. 55,747.

"MAJOLICA SOAP," for household (being common) soaps. By F. Wheen (trading as Richard Wheen & Sons), Deptford Creek, S.E. 55,774.

"BAYNHAM'S HEADACHE POWDERS," and other wording, on an oblong slip label; for a patent medicine. By W. B. Baynham, 6 Rye Lane, Peckham. 55,768.

"MACHON'S COMFORTINE," and other wording, on label, with signature of depositor imprinted diagonally across it; for children's medicine. By E. Machon, 5 Park Street, Derby. 55,813.

"SIEBER'S HEALTH BODY WASH," and figure of woman holding flag; for a medicated body wash (55,867), and "Sieber's Curative Ointment"; for an ointment (55,863). By Charles Henry Sieber, Chesford House, Leamington.

"MIRROR," upon a salver-like design, figures of spoons and forks upon it, and a teapot on the top; for a plate-powder. By F. S. Newall, Washington, Dartmouth. 55,002.

A diamond-shaped figure, with figure of a retort, the word "Purity" and large "G" upon it; for chemical substances. By Goulding, Bannister & Co. (Lim.), 103 Patrick Street, Cork. 55,129-30.

Oval label (similar to those used for Bass's and other beers), with two hearts inverted upon each other, the upper one with "The A1" upon it, also other wording; for horehound beer. By The Moun Aërated Water Company (Lim.), Woodbourne Works, Douglas, Isle of Man. 46,225.

Oval design, with nude female figure resting on a chair, and designation of depositors; for toilet-soap. By L. Dalton & Co. (trading as The Continental Perfumery Company), Frankfort-on-Main, Germany. 56,282.

"SANOLINE, A PURE ODOURLESS PETROLEUM JELLY," and other wording, on oblong fancy label; for a medicinal preparation. By Lorimer & Co., Hargrave Park Road, London, N. 56288.

"THE 'ENTERPRISE,'" "The 'Advance,'" "The 'Defiance,'" "The 'Criterion,'" "The 'Alert,'" "The 'Success,'" "The 'Rival,'" "The 'Chancellor,'" and "The 'Cascade,'" for soda-water machines and all other machines used in the manufacture of mineral and aerated waters, natural and artificial. By Bratby & Hinchliffe, Sandford Street, Ancoats, Manchester. 56518-25.

Figure of a knotted rope; for common soaps. By British Soap Company, Wolverhampton. 56589.

The signature of the depositors; for chemical substances (class 1); artificial manures, disinfectants, sheep-washes, &c.; tinctures, extracts carbolic acids, &c.; candles, common soap, washing-powders, &c., and perfumery (including toilet articles, &c.). By F. C. Calvert & Co., Bradford. 56721-5.

Personalities.

MR. JAMES WEST KNIGHTS has been reappointed public analyst for Huntingdonshire.

MR. OTTO HEHNER has been reappointed public analyst for the borough of Derby.

MR. T. TAME, late of Chepstow, has bought Mr. Lonsdale's business at High Wycombe.

MR. EDWIN WILLIAM ALABONE, lately a member of the Royal College of Surgeons, has had his name removed from the *Medical Register* by the General Medical Council.

MR. THOMAS MADEN, a dentist, had his name incorrectly and fraudulently placed upon the *Dental Register*, and, in consequence thereof, it has been removed by the authorities.

MR. ALFRED BOSTOCK HILL, M.D., F.I.C., &c., has been reappointed public analyst for the borough of Royal Leamington Spa.

PROFESSOR TYNDALL will not give the next course of Christmas lectures at the Royal Institution. It has been arranged for Professor Dewar to give them, and the subject will be "The Chemistry of Light and Photography."

MR. JONATHAN PHILLIPS, pharmaceutical chemist, Wigan, should have been included among the chemists elected on town councils. Mr. R. Burnett, chemist, Fraserburgh, has also received a similar compliment from his fellow-townsmen.

MR. W. H. BAKER, chemist, Hoole Pharmacy, Chester, has purchased the premises lately occupied by Mr. Carman, Frodsham Street, Chester. He has made extensive alterations to suit the modern requirements of a dispensing business. Mr. Baker still retains the Hoole Pharmacy.

PROF. WM. SAUNDERS, of London, Ont., has been appointed director of the Experimental Farm Stations of the Dominion of Canada. His jurisdiction will extend over the stations in all parts of the Dominion, under the direction of Hon. Mr. Carling, Minister of Agriculture. Prof. Saunders visited this country last summer in company with Prof. Remington, and he took an active part in the arrangements of the Canadian section of the Colonial and Indian Exhibition.

Obituary.

ELDRIDGE.—On November 4, Mr. James Upton Eldridge, chemist and druggist, late of Great Yarmouth. Aged 77.

M McNAY.—On October 23, Mr. John McNay, chemist and druggist, Thornhill. Aged 65.

MITCHELL.—On November 2, Mr. Joseph Mitchell, chemist and druggist, Barnsley. Aged 64.

WHITE.—On November 17, at 7 Guildhall Square, Carmarthen, John Davies White, member of the Pharmaceutical Society, and principal of the firm of White Brothers, Carmarthen.

Trade Notes.

EDINBURGH EXHIBITION.—The gold medal for isinglass was awarded to Messrs. Gridley & Co., of Bishopsgate Avenue, for their exhibit of Russian, Brazilian, and other isinglass.

CHEMISTS issuing almanacs for 1887 are advised to notice the advertisements of Messrs. Rowland & Sons and of the Sanitas Company (Limited). These firms announce that they are willing to place advertisements in such publications.

THE pill poets who so abundantly responded to our competition a few months since may be glad to know that in a paper called *Chat*, published at Landport, Mr. A. J. Fletcher, of Southsea, offers prizes of 1*l.*, 10*s.*, and 5*s.* for the best sets of three verses in praise of Fletcher's neuralgic pills.

CHLORODYNE (W. H. B.).—Mr. W. H. Bulley, of Exeter, is now bringing under the notice of the trade his excellent preparation, which for a number of years has been put to practical test locally. The chlorodyne is just such a preparation as many pharmacists aim at. It is a perfectly inseparable and limpid liquid of a brown colour, mixes readily with water to form a clear solution, and is, altogether, a preparation which pharmacists may use with confidence.

THE "HEALTH" FEEDING BOTTLE.—This is a German novelty which is being introduced here by Messrs. Künster & Ricard, 11 Queen Victoria Street, E.C. The bottles are of various shapes, of 4-litre capacity, and graduated. The fittings, with the exception of the rubber tube and bone shield, are entirely of block tin and glass. Above the glass tube is a ball valve, which effectually prevents the teat being emptied automatically of its contents, thus permitting the child to resume feeding by merely pressing the teat. This is considered to be the special feature of the bottle.

FOSSILINE.—We have received samples of the white and amber-coloured varieties of this soft paraffin, which is the speciality of Messrs. Evans, Sons & Co., Liverpool. The makers have succeeded in greatly improving the fossiline, so that it corresponds in all respects with the pharmacopoeial requirements for *Paraffinum molle*. It appears not to be a mixture of hard paraffin and heavy shale oil, but is perfectly homogeneous, free from crystals, and not stringy. The amber-coloured variety has a specific gravity of 0.865 at the melting point (38–39° C.), and is only feebly fluorescent, as well as odourless. The white has a specific gravity of 0.832 at the melting point (40–41° C.), and is also odourless and free from "bloom." Both are well adapted for pharmaceutical preparations, and for making pomades and other similar toilet requisites.

MASON'S EXTRACTS.—Within the past few years a large demand has sprung up amongst working people for fermented but non-intoxicating beverages, in the preparation of which various substances, such as herbs, ginger and other essences, are used. Messrs. Newball & Mason, Park Place, Nottingham, were amongst the first to recognise in this demand a source of business to the chemist, and they have succeeded in producing various extracts which impart both flavour and body to home-made beer. Amongst them the Extract of Herbs for making "Botanic Beer" is one of the best; but all are of excellent quality, and are valuable additions to the chemist's stock. The extracts are neatly put up, and the makers supply very amusing cards and handbills to aid in introducing the goods where they are not known.

CINCHONA FEBRIFUGE IN INDIA.—An attempt was made last year by the Indian Government to promote the use of cinchona in the Central Provinces of British India, by offering it for sale in small quantities at cost price. This attempt has proved a failure; for in the report of the charitable dispensaries in the Central Provinces for the last year, the Civil Surgeon of Chanda complains that cinchona febrifuge "is a nauseous and a very uncertain drug, and dear at its price when compared with quinine." The people are willing enough to use cinchona, if they obtain it gratis; but they will not buy it, even at cost price, except in insignificant quantity. For quinine, on the other hand, there is always an eager demand; and in future the febrifuge will be offered for sale in much smaller quantities than has hitherto been the practice.—*Indian Agriculturist*.

THE CHEMIST AND DRUGGIST.

HEAD OFFICE—

42 Cannon Street, LONDON, E.C.

BRANCH OFFICES—Melbourne, Australasia; and Temple Court, New York, U.S.A.

CHEMISTS' ALMANACKS AND PRICE LISTS.

THE "SANITAS" COMPANY, LIMITED,

Of Letchford's Buildings, Bethnal Green, London, E.,

Will be glad to be favoured by Chemists who publish PRICE LISTS or ALMANACKS to the general public in their neighbourhoods with a Copy of the last issue, and information as to the next intended one, and the charge for Half-page or Page Advertisement on Front of Cover, Outside Back Cover, or Facing Matter.

Friedrichshall.

THE WELL-KNOWN APERIENT MINERAL WATER.

IMPORTANT NOTICE.

By reason of an improved method of caption, by which dilution is avoided FRIEDRICHSHALL WATER will be found now to be of CONSIDERABLY GREATER STRENGTH and EFFICACY than heretofore. The ordinary dose is a large wineglassful (4 ounces) taken fasting. Most efficacious and more acceptable to the palate when heated or mixed with an equal quantity of very hot water.

"I know nothing at all equal to Friedrichshall. The LONGER it is taken the SMALLER is the quantity necessary to effect the purpose."

SIR HENRY THOMPSON, F.R.C.S., Lond.

Of all Chemists and Mineral Water Dealers. [2]

HEARON, SQUIRE & FRANCIS, Wholesale and Export Druggists.

Established



1714.

FOOD FOR INFANTS IN BULK.

PHARMACEUTICAL PREPARATIONS IN VACUO.

MEDICATED BISCUITS—"HERON," Nos. 1, 2, & 3.

5 COLEMAN STREET, LONDON.

MUMFORD'S PURE FULLERS EARTH

Finest powdered, 14s. per cwt.; in 7, 14, 28, 56 lb. Packages, 16s. per cwt. net, bag included, delivered free in London. Samples post free. [3]
6 S. MUMFORD, STEAM MILLS, FARRINGTON ROAD, LONDON, E.C.

SCHWEPPE'S TABLE WATERS,

As Supplied to HER MAJESTY THE QUEEN.

CARRIAGE PAID on Full and Empties.

SCHWEPPE'S DRY GINGER ALE.

51 Berners Street, LONDON,





AND AT

Liverpool, Bristol, Derby, Glasgow, Sydney, & New York.

To Advertisers
CATALOGUES & PRICE LISTS ILLUSTRATED
Advert. Blocks Engraved in Best Style
at Moderate Cost. + + + + + APPLY TO
W. BARKER & SON, 172, STRAND, LONDON.

SILICATED CARBON PATENT MOVABLE BLOCK FILTERS.

SEE ADVERTISEMENT, PAGE 12.

	ELLIMAN'S		
FOR HORSES AND CATTLE			SOLD OVERSEAS
MANUFACTURED BY SLOUGH ENGLAND	THE HIGHEST CURED		In Bottles 1/2, 1/4, 3/4 EACH
EMBROCATION			

EDITORIAL NOTES.

THE PHARMACEUTICAL COUNCIL AND WIDOWS.

THE astonishing display of vigour in vindication of the Pharmacy Act recently manifested by the official guardians of that precious possession will strain the faith of the staunchest friends of the Society in the discretion of their Council. All over the country, chemists and members of the Pharmaceutical Society are complaining of the indifference with which flagrant infringements of the Act seem to be regarded at Bloomsbury Square, and urgent representations

are made from time to time in the hope of rousing the Council to a sense of its duty. The latter body, so far as they condescend to take any notice at all of the wishes of their constituents, either gather around them the skirts of their official dignity, or point to a certain number of fines recovered in privately settled cases. Neither of these answers is satisfactory. It is desirable that the courts and the public should know more of the Pharmacy Act than they can learn of it from an occasional prosecution under the 17th section. An unqualified person owning a general store sells laudanum or other poison; he labels it with the name of a person, not the owner of the shop, and is prosecuted for not perfectly complying with the regulations of the Act. Is it wonderful that in such a case the magistrates should regard the offence as a trivial one? It would assume quite a different aspect if it could be shown that the dealer had ventured on a business which the legislature had declared should be carried on by certain qualified men only. Such a prosecution, however, can be undertaken only by the Pharmaceutical Council.

But in pressing on that body a more spiteful policy, we have, it appears, only urged "bloody instructions, which, being taught, return to plague the inventor": like a badly wound-up infernal machine, the Council's misdirected energy has exploded in a very unfortunate place. Their attack on a lady carrying on business at Leamington, in full accordance, as she believed, with the provisions of the Act, seems like a purely wanton piece of mischief. The lady was left a widow thirteen years ago, with a business which would seem to have brought her a fair income ever since. The Pharmacy Act expressly allows her, as the executor of her husband's will, to carry on the business if she employs a duly-qualified manager. She appears to have been very careful to comply strictly with the requirements of the law; but last week she was sued at the Warwick County Court for an alleged infringement thereof. The letters we publish this week, we are convinced, express the satisfaction of the trade generally at the defeat of the plaintiffs in this ill-advised attack. The victory of the Society would have spread alarm and dismay in the ranks; and it would have been, not a fanciful, but an actual disaster to chemists, while it would not have promoted the public safety in any degree. The Council sought to establish that a widow should not be allowed to carry on her late husband's business except to the limited extent of fulfilling her special duties as executrix. The judge, however, happily adopted the view urged on him by the solicitor for the defence, that the Act intended to grant to "any executor, administrator, or trustee" an unlimited right to carry on a business forming a part of the estate with which such persons might have to deal, under certain sufficiently protective conditions. He saw no reason, he said, why he should enlarge the words of the statute beyond what the statute expressed.

Surely it can hardly be necessary to urge the Council to accept their defeat gracefully, and "proceed no further in this business." They have done the trade a service, though they can hardly look for thanks for it, by getting even a County Court decision on a point of some obscurity in the Pharmacy Act, in favour of their constituents. Let them acquiesce in the result, and be grateful for it. In appealing to a higher Court they will be acting with injustice towards their opponent, who can have no wish either to abandon her property, or to undertake a costly law suit for the sake of clearing up a difficult technicality in an Act for the drafting of which she, at least, is not responsible; and they will assuredly alienate the sympathy with which a large section of the trade would willingly regard their work. On behalf of chemists with wives who may become widows, the Council should apply to

themselves the argument which almost persuaded Macbeth against the murder of Duncan:—

He's here in double trust :
First, as I am his kinsman and his subject,
Strong both against the deed ; then, as his host,
Who should against his murderer shut the door
Not bear the knife myself.

REPORTS ON THE PHARMACOPŒIA.

It will be noticed that an important step has been taken by the Medical Council with a view to ensure the more effective revision of the British Pharmacopœia, and facilitate the preparation of a new edition when such shall be called for. Professor Attfield, F.R.S., one of the three official editors of the Pharmacopœia of 1885, and the one on whom, no doubt, the greater part of the editorial work devolved, was asked some little time since by the Pharmacopœia Committee of the Medical Council to formulate his views in regard to the preparation of periodical reports on all matters of Pharmacopœia interest. His suggestions were laid before the Council last week, and practically approved. An arrangement which the Pharmacopœia Committee had made with Professor Attfield for the preparation of these annual reports was sanctioned by the Council, and the scheme is therefore now established, and will be worked on the lines sketched in the memorandum which Professor Attfield had submitted to Dr. Quain as the chairman of the Committee.

The reports to be thus compiled will be anticipated with much interest, and will probably prove of the highest value. Year by year the "Reporter on the British Pharmacopœia to the Medical Council" will furnish in concise form an essence of so much of the pharmaceutical literature and the pharmaceutical work of the world as shall have a direct bearing on the improvement of processes or the suggestion of new remedies for the next Pharmacopœia. A study of the scheme Professor Attfield has mapped out for the "Reporter" will show that the work contemplated may easily grow to a year-book of pharmacy: that it will be industriously compiled, skilfully condensed, and scientifically criticised, may be assumed from the fact that he himself will be the Reporter, and that Professors Redwood and Bentley are to be associated in the work as "Consultants."

One feature in this new system should be satisfactory to pharmacists. To them is mainly due the work out of which a new pharmacopœia has to be moulded. The improvements in the last edition of the official work had been suggested almost exclusively by pharmacists; criticisms on the work—that is, those of any weight—have emanated almost entirely from working pharmacists. Never before had the medical profession so perfectly abandoned all attempt to keep themselves in the race. Before another Pharmacopœia is published it is possible that they may formally hand over to the pharmaceutical profession all responsibility for its pharmacy. This object is likely to be promoted very efficiently by Professor Attfield's reports. The official mind of medicine has not yet realised how rapidly pharmacy is being separated from therapeutics; Dr. Attfield proposes in these reports to place before them in abstract the researches and opinions of "theraputists, pharmacologists, pharmaceutical chemists and chemists-and-druggists, scientific and analytical chemists, and botanists." It will require very vigorous shutting of eyes to fail to see in such a review of the work of the year who are the workers.

The compilation of a new Pharmacopœia from ten or a dozen fairly complete annual reports, aided as these will be by the criticisms which will naturally follow them, will be an easy and almost a mechanical task. Whoever originated the idea deserves the credit of having contributed a valuable reform to official pharmacy, and will probably be found to have suggested a piece of periodical pharmaceutical literature of peculiar value.

MR. BARCLAY'S EDUCATIONAL SCHEME.

EDUCATION is a very tempting subject to pharmacists who have done well in business, or who may be of a philanthropic disposition, and Mr. Thomas Barclay has, in a very forcible manner, just taken a prominent position amongst the advocates of a properly systematised and compulsory curriculum for pharmaceutical apprentices. The address which Mr. Barclay delivered to the Midlands Association on Tuesday evening is one which we are sure will be read and carefully studied by all chemists. There is no one better able to judge of the condition of pharmacy in its high and low degrees, and we are glad to see that he points out that the successful prosecution of a pharmaceutical business requires enterprise on the part of chemists, as well as duly organised systems of education or examination. But Mr. Barclay is decidedly of opinion that, in conjunction with greater attention to business as a trade, it is also necessary for the improvement of pharmacy to institute a compulsory course of education for its young votaries; and he goes further than any of his predecessors in discussing, from a provincial point of view, the possibilities of education for the provinces. Most of the schemes which have previously been hatched have smacked of the idea which was taken as the basis of education by pharmaceutical leaders fully forty years ago—to wit, a certain number of lectures, with so much practical chemistry thrown in, to be undergone by the student at a specific period of his career. Such a scheme as this, however well intentioned it may be, is not universally adapted to the drug trade. The calling is not such a fine thing as to allow all apprentices and assistants to let days and nights slip past unoccupied by directed study, and although, unfortunately, many do neglect present opportunities, were a curriculum made compulsory a demand would spring up for evening classes. Mr. Barclay has the credit of grasping this fact and placing before us in a very clear manner a scheme of education which will certainly place out of sight some recent performances. It will be noted that in the introductory part of his discourse a very full and interesting record of the work of local associations in education is given, and the replies to Mr. Barclay's inquiries fully support the statement recently made in these columns that pharmaceutical education as directed by local associations has been a failure. At present only two schools show any sign of life, one in Sheffield, for which Mr. Barclay seems to prophesy early collapse, although it is very active just now, the other at Newcastle-on-Tyne, now in its second year, and which cannot go on much longer, if for no other reason than that each student costs a little more than three guineas per annum for rent. Over the whole of Great Britain Mr. Barclay finds only 240 young chemists who are studying under the direction of teachers, and he attributes this discouraging fact to depressed trade, and to doctors dispensing their own medicines. With better trade all round and more complaisant doctors, there would no doubt be more heart in pharmacists to push forward their outposts; but no curriculum will accomplish these results. At present it is sufficiently recognised that pharmacists are the most competent men for dispensing duties, yet they fail in most cases to secure the occupation, for the simple reason that they cannot make doctors see the pecuniary advantage of such a division of labour. Legislation may some day bring about the desired result, but it is hardly likely enough to be looked upon even as a chance. The best hope is that medical men will come to regard dispensing as they now do advertising. When that happens no one need fear that chemists will not be perfectly competent to do all the dispensing which may come in their way. There are some parts of the

kingdom, notably Ireland and Scotland, in which chemists are on as good terms with doctors as any enthusiast could wish, and they get plenty of dispensing to do, not because they are better qualified than less-favoured pharmacists, but because the doctors find it advantageous to delegate that part of their work to them.

The scheme of education which Mr. Barclay proposes is much bolder than any which has previously been suggested. It is based partly on the rejected curriculum and partly on the educational system of the Science and Art Department. The rejected curriculum is drawn upon only for the numbers of lectures in specific subjects and the period of practical training in chemistry. To this Mr. Barclay would add a course of training in dispensing and practical pharmacy, which was not provided for in the Pharmaceutical Council's scheme. It will be remembered that that scheme provided for the Preliminary examination being passed before apprenticeship. After this there was an ugly gap of three years' inactivity, or, we may rather say, freedom from compulsion. This Mr. Barclay fills up, commencing the curriculum as soon as apprenticeship is entered upon, and he provides for an examination at the end of each session. In all details he closely follows the South Kensington plans, even to the setting of the papers by a central authority, viz. the professors of the Pharmaceutical Society, and he would also subsidise teachers with the Society's surplus examination funds, giving payment according to the results. He calculates that the plan, with compulsion, would work admirably, and that some thousands of students would annually pass through the classes. One important result would early manifest itself by the system, viz., that idlers would soon become disgusted and give up pharmacy, whereas by the Council's scheme these men are allowed to finish their apprenticeship before commencing study, and when it is becoming too late to shift into a less onerous calling. The best part of the scheme is that it endeavours to bring education to the doors of a large section of chemists' apprentices, and permits any chemist who can get together half-a-dozen pupils to begin lecturing them on the subjects of the curriculum. All this is very good, especially if the Pharmaceutical Council will pass an educational vote of a few thousand pounds annually. We do not think that this is at all likely to happen, and as subsidisation and compulsion are at the bottom of the whole scheme, we fear it will follow its predecessors, and provincial education generally, into obscurity and neglect. It may be a pity that it should do so, because the scheme provides a more reasonable means of education than any other; but pharmacy is not yet ripe for it, nor is the demand for education so great or urgent that it cannot be met by personal effort.

True Fair Trade.

That it is possible even now to check the cutters to the mutual advantage of manufacturers and retailers is evidenced by the following letter published in the *Ironmonger* over the signature "Commercial":—

"Some time ago," says the writer, "the firm I am connected with came to the conclusion that the practice of cutting prices meant commercial suicide all round, and especially as applied to patented articles, and determined to make a firm stand against it. With this object in view the following notice was, and still is, stamped on all invoices:—

"Private. Special Notice. We request you to sell our manufactures to the public at list prices. Any departure from this rule will close the account."

"It has done good. A few short-sighted ones refused 'to be dictated to,' and had to accept the alternative, but their wiser neighbours said it was worth while stocking our specialties, as they knew they would get their legitimate profit. By this means confidence has been established, and a very satisfactory and increasing business is the outcome."

To make a scheme like this successful the manufacturer must deal direct with the retailer, and that is what he will do more and more. He must get over his prejudice against the "multiplicity of small accounts": the paucity of them is the only thing worth troubling about. He must consider his business from a commercial and not from a book-keeper's point of view, and if he wants to attain success without trouble, he had better pray to some good fairy to transport him back to the good old times of fifty years ago.

* *

Singular Resemblance. A pamphlet entitled "Home Treatment," purporting to be issued by "James Holland, M.D.," has been sent to us by a correspondent. It details in the well-known old style the wonderful discovery of the "Kanaka Compound," which was obtained from "the medicine-man of the Metcha-wel-ha Indians," and adds a touching history narrating the reclamation of a young gentleman from habits of drunkenness by the use of this blessed remedy. The funny part of this pamphlet presents itself in the portrait on the cover, which is supposed to represent "James Holland, M.D." Our correspondent sends us a copy of Mother Siegel's almanac for 1886, wherein exactly the same portrait is described as that of Zachary Taylor, President of the United States 1849-50. Mrs. Farrington's testimonial is probably as authentic as Dr. Holland's portrait.

* *

Arsenic-eating. In connection with the exploits of the Italian fasting men, which are now causing a sensation in Paris, it is worthy of notice that the habit of swallowing or chewing certain drugs in order to impart to the body an increased fatigue-resisting power, is not confined to South American Indians and Malays. Among the inhabitants of the Austrian province of Steiermark the practice of eating arsenic has long existed, and recent investigations show the habit to be widely spread among both sexes; but, as the practice is generally kept secret by its devotees, it is difficult to obtain precise data as to the extent of its prevalence. An Austrian doctor has recently examined the physical and mental condition of several arsenic-eaters, who had been taking variable quantities of ordinary white arsenic or red orpiment at intervals for a long period, in one instance even during thirty years. The presence of arsenic in the urine showed the average dose of the drug taken daily to be 30 milligrammes, or three times the amount of the largest dose prescribed in medicine. Physically the persons examined were quite up to the average and able to perform ordinary manual labour, while their intellectual level was not below that of their class. Some of the arsenic-eaters were thin, others normally stout, and the arsenic habit did not appear to prevent the formation of fat. In several cases the cause of the habit was alleged to be the strengthening influence of arsenic on the digestive organs. None of the eight cases under examination showed symptoms of slow, chronic poisoning. The drug is principally taken in order to facilitate respiration when climbing steep mountains, and it is said to answer this purpose exceedingly well. Habitual arsenic-eaters allege that the drug acts as a preservative against disease and raises the spirits during fatiguing journeys. Dr. Büchner, a Munich physician, who recommended arsenic in tuberculosis, gives the authority of his name for the statement that arsenic is habitually mixed with the dishes served upon the tables of young ladies' boarding-schools in Switzerland, and mentions that young persons are far better able to assimilate the drug than middle-aged or old people.

* *

Corner for Students. The gentleman who took the first prize in this competition last week writes to express his thanks for the aid furnished to students by this department of THE CHEMIST AND DRUGGIST. He also regrets that some "able correspondent" has not previously criticised the depreciatory remarks made recently by the President of the North of England Pharmaceutical Association in regard to the "weeklies of pharmacy" in general, and Students' Corners in particular. "Your master, or your fellow assistant or apprentice," said Mr. Martin, "can prepare for you test powders and solutions which will be educationally of far more value to you, and you will be saved the excitement of trying for prizes in competitions in which the gain or loss has no practical bearing upon your daily train-

ing." Our correspondent is good enough to argue almost seriously against this very harmless piece of pedantry. The Corner for Students published in this Journal, and which evidently was the object of Mr. Martin's attack, needs no defence. It has been warmly commended both publicly and privately by some of the first living teachers of chemistry, and it has done more sound educational pharmaceutical work than any half-dozen local associations with all their paraphernalia of classes, lectures, and prospectuses. Several generations of students have availed themselves of its aid, and quite a number of our prize-takers are men who have since become eminent as scientific pharmacists. Mr. Martin could make a lively speech on the deficiencies of the "weeklies of pharmacy" in general, but he will not acquire the position of a pharmaceutical authority by ungenerous sneers at a piece of honest, serious work, which he can have never carefully examined.

* *

A German "Board of Trade Journal." If imitation is the sincerest form of flattery, the originators of the Board of Trade's journalistic venture may well feel gratified. The German Government has been approached by a number of influential commercial firms with a view to obtain the establishment of an official journal on the lines of that recently founded in this country. It appears that the habit of placing consular reports in official pigeon-holes to mature until no trace of their original freshness is left prevails in Germany as well as in Great Britain. The German business men, with whom the scheme has been initiated, have laid their views before Secretary of State von Boetticher, and have especially called his attention to the efforts of the British Government to render the costly consular service of the country more useful to the trading classes. The title suggested for the new German journal is "Consular Correspondence," and it is thought that Mr. von Boetticher's decision, which is shortly expected, will be favourable to the scheme.

* *

A Repealed Curriculum. The advocates of the compulsory curriculum for pharmaceutical students are fond of pointing out that they are moving with the times, and in accordance with the customs of the higher professions. It is therefore of some interest to know that an important section of the legal profession—viz. the Lords of Session, who administer Scotch law in Parliament Square, Edinburgh—have recently taken action contrary to that which our pharmaceutical politicians are promoting. In an Act of Sederunt dated November 4 it is declared that "The fourth section of the Act of Sederunt anent examinations of Law Agents, dated 20th December, 1873, and also the first section of the Amending Act, dated 28th January, 1874, are hereby repealed. And it shall not be necessary for the future that any Applicant for admission as a Law Agent shall have attended the classes of Scots Law and Conveyancing in a Scottish University. But it shall be in the power of the Examiners, in conducting the examination of any Applicant for admission, to take into account whether such Applicant has or has not attended such classes." This new Act entirely reverses the custom which has been followed in the training of applicants for admission as procurators or law agents. Since 1865 they have been required to attend classes in the above-named subjects. This brought large numbers of lawyers' clerks to the University towns during a part of their career, thereby flooding the law market with cheap labour—for the students generally combine work with study. Now, the Lords of Session—all of whom are men of culture, while some have been connected with great educational schemes—have come to the conclusion, after a twenty years' experience, that the curriculum is unnecessary. It will be observed that this implies no alteration in the nature of the qualification, but simply that the students are now permitted to get their knowledge wherever and whenever they will; and that is what we advocate for the young pharmacist.

* *

Heads of their Professions. A correspondent of the *Pall Mall Gazette* has recorded a lively little story of the late Fred Archer, the jockey, and his almost equally eminent contemporary, Sir James L'aget. Archer, having been bitten or otherwise injured by a horse

on one occasion, called on Sir James Paget. The eminent surgeon having bound up his wound, Archer requested to know how long it would take to heal. "Oh," said Sir James, "I think in three or four weeks you will be all right."

"But shall I be fit for the Derby?" asked Archer.

"Ye-es," was the reply. "Oh, yes! I think you may go to the Derby."

"No, but you don't quite understand me, Sir James," persisted the jockey. "I mean, shall I be fit to ride?"

"Well, I don't know," was the answer. "Better drive, better drive!"

Archer, rather taken aback by this very innocent and unexpected rejoinder, had to explain. "I am afraid Sir James, you scarcely realise who I am?"

"No," said the surgeon, politely, referring to the patient's visiting card. "I see I have the honour of receiving Mr. Archer, but——"

"Well," said Archer, "I suppose I may say that what you are in your profession, Sir James, that I am in mine," and proceeded to tell him what that profession was.

The famous surgeon, on learning the status of his visitor, was at once greatly interested, and asked him eagerly many questions, among others, What would be his loss supposing he should be unable to fulfil the Derby engagement? To which Archer replied, "About 2,000l." His average annual income he stated to be about 8,000l.; upon which Sir James is said to have remarked:—"You may well say that what I am in my profession that you are in yours. I only wish that my profession were half as profitable as yours."

* *

Disqualification of Dentists. The General Medical Council, at its meeting held last week, had under its consideration certain additions to the standing orders suggested by the Executive Committee in reference to dentists, and arrived at the following resolutions:—

"(a) That when the General Council has received notice from a licensing body that any qualification or qualifications have been duly and legally withdrawn from a registered dental practitioner by such body, provided that such qualification was not withdrawn on account of any of the causes mentioned in the eighteenth section of the Dentists Act, as insufficient to disqualify a person from practising dentistry, then the Council shall, if it think fit, by formal resolution proposed from the chair, direct the Registrar to remove such qualification or qualifications from the *Dentists' Register*.

"(b) If, under the direction of the General Medical Council, all the qualifications of any registered dental practitioner have been erased from the *Dentists' Register*, then the Council shall, if it think fit, by formal resolution proposed from the chair, direct the Registrar to remove the name of such practitioner from the *Register*."

It would appear that this resolution does not affect registered dentists who do not hold diplomas from licensing bodies.

* *

Testing the Analyst. The case which we referred to last week has called forth several more letters from well-known chemists, including Prof. Attfield and Mr. A. H. Allen. Mr. Allen points out that Dr. Hassall showed that 3 grains of strychnine are required to impart a bitter flavour to a gallon of beer. This statement appears to us to require corroboration. The public press has very freely commented on the subject. The *Spectator* says:—"The discussion seems to us to show that the Adulteration Acts should not require of the public analysts to discover all possible adulterations, but only the sort of adulterations which the ordinary adulterators of beer would find it most profitable to attempt. It may be, and is, we imagine, quite true that if beer and other sorts of food are to be really exhaustively analysed, a great deal more time and trouble and money would be needed than would be at all needful for the purposes in question. We do not blame the analyst for not discovering what he was not in the least prepared to suspect. But we do blame the Adulteration Acts for asking a sort of analysis which it would be impossible to secure under the actual conditions of the case." The policy of limitation is not altogether a commendable one. The *Aberdeen Free Press* shows this in saying:—"It is difficult to see what is the real value of these experts [public analysts]. The rogue who finds

that his favourite chemical or drug has been included in the list of suspected substances will very soon find a substitute."

* *

A Big Idea. Under the title of the "United Specialities (Limited)" a curiosity in companies has just been registered. It appears that a certain Mr. Hutton Webb, of 20 Bucklersbury, is the proprietor of no fewer than 133 specialities, besides "veterinary remedies (various)," which would probably bring up the total to 150. Mr. Webb's inventive genius seems to have displayed itself right through the alphabet with the exception of X, Y, and Z, which he has not yet touched. The schedule of his discoveries begins with Anti-scorbutic Elixir, and finishes with Worm Cure, taking in on the road such various compounds as Baby Soother, Bug Destroyer, Colic Cure, Digestive Candy, Epicurean Sauce, Hair Remover and Hair Producer, Itch Ointment, Jams, &c. All this immense list Mr. Webb agrees to sell to Mr. George Bowaek, who acts on behalf of the new company, for 20,000 l. shares therein, and 1 per cent. in cash for the rest of the capital subscribed, together with a certain royalty on sales only payable after the rest of the shareholders have received 25 per cent. The proposed company, whose registered office is at 39 Lombard Street, announces a nominal capital of 150,000l., and intends not only to manufacture and sell in the United Kingdom and abroad the specialities scheduled "and other productions of a similar character," but also to purchase any processes, trade-marks, and recipes, and to carry on the business of a co-operative society and general supply stores, and to conduct a series of businesses ranging from carpenters to diamond merchants, from chemists and druggists to livery-stable keepers, and from dentists to bankers. A list of some 150 trades in which it is proposed to engage is given, and powers are prudently taken "to establish and carry on any other business or trade." The first shareholders are one colonel (who is to be chairman of the company), three gentlemen with no occupation, two engineers, and one Nottingham manufacturer. Mr. Webb's 3 per cent. royalty after the payment of 25 per cent. to the shareholders will not be grudging by the latter.

THE BRITISH PHARMACOPOEIA.

ANNUAL REPORTS.

At a meeting of the General Medical Council, held on November 17, Dr. Quain presented the following report of the Pharmacopoeia Committee, which was adopted:—

"The Pharmacopoeia Committee have to report to the Council that the first issue of 20,000 copies of the work have been disposed of, and that a reprint has been issued consisting of 3,000 copies, from the stereotyped plates, of which 730 have been already sold. The opportunity has been taken during reprinting of introducing into the body of the work such corrections as were found to be necessary. It may be noted that a list of these corrections can be had, without charge, from the Registrar, or from the publishers, by those who have purchased copies of the original issue.

"The committee further report that they have arranged with Professor Attfield to prepare an annual report on the revision hereafter of the Pharmacopoeia. The following is the plan submitted by Professor Attfield for carrying out this intention, and approved by the committee:—

"Broadly, a reporter should present (annually) to the Pharmacopoeia Committee of the Council an abstract of the published researches and opinions which are or may become of importance in connection with any further revision or edition of the Pharmacopoeia—researches, opinions, &c., published by therapeutists, pharmacologists, pharmaceutical chemists and chemists and druggists, scientific and analytical chemists, and botanists.

"Secondly, while leaving purely original experimental researches to the workers in the various public and private laboratories where such researches are conducted, a reporter should perform such experiments as may be necessary for the application of those original researches to the exact purposes of the Pharmacopoeia.

"Thirdly, as regards suggested improvements of official processes, whether synthetical or analytical, a reporter should,

when necessary, obtain experimental confirmation, or otherwise, of the suggestions, before reporting them to the committee.

"All this work, both literary and experimental, should be done regularly year by year; for the large and numerous areas of knowledge laid under contribution in revising a Pharmacopœia are fast getting too extensive to be properly investigated in any short period preceding the issue of a new Pharmacopœia.

"As for the classification of the annual reports, I think it should pretty much follow the division of matter in the Pharmacopœia itself. That is to say, questions of general construction and literary arrangement, and questions relating to weights and measures, to chemical and general nomenclature and notation, to the uniform disintegration of drugs, to temperature, &c., may be treated first. Then would follow the consideration of new remedies and compounds proposed for addition to the Pharmacopœia, and of old remedies and compounds proposed for omission from the Pharmacopœia. Any suggested alterations in the names of official articles and preparations would next be discussed. Suggested alterations respecting any of the alphabetically arranged articles or monographs in the text and appendix of the Pharmacopœia—nearly 1,000 in number—would form the concluding portion, and, indeed, the bulk, of the annual reports—alterations relating to (*a*) leading names and associated synonyms, (*b*) definitions of articles of the *Materia Medica*, (*c*) descriptive characters of those articles, (*d*) mode of preparation of compounds, (*e*) characters and qualitative and quantitative tests of those compounds, (*f*) doses, and (*g*) additions to, omissions from, and alterations in, the cross references,

"There may also be some matters of importance to be considered which do not fall within either of the foregoing classes of subjects, as, for one example, the question as to whether or not any changes—and, if any, what changes—can be effected in a future British Pharmacopœia to better adapt it to Indian and Colonial requirements.

"The annual reports should, of course, contain clear references to all sources of information; so that the Committee, future editors, and all persons interested in the subject could readily refer to all data.

"Finally, the hands of the reporter or reporters would be strengthened, and the reports would come before the Committee with greater weight, if draft reports, before presentation, were carefully considered by the three editors of the British Pharmacopœia, 1885, who, for this purpose, should be regarded as 'consultants.' The designation of a reporter would be, probably, 'Reporter on the British Pharmacopœia to the Medical Council;' the instructions to any such officer being, I presume, to report annually, on some such lines as the foregoing, to the Pharmacopœia Committee of the Council."

FRENCH PHARMACEUTICAL NEWS.

(From our Paris Correspondent.)

FERMENTATION WITHOUT YEAST.—According to a memoir presented on November 8 by M. Duclaux to the Academy of Sciences, direct sunlight has the property of decomposing an alkaline solution of glucose into alcohol and carbonic acid without the help of yeast or any ferment. The paper not being yet printed, the details of the experiments cannot at present be obtained.

THE ITALIAN FASTER, Merlatti, is, so far, the only one in the race, and at the last accounts was hopeful and hearty on his thirtieth day of fasting. On November 14 the record showed the following:—Pulsations, 76; temperature, 36.9°; respiration, 24; dynamometer, 138; spirometer, 2,100; urea, 5 grammes per litre. It looks now as if Succi were not going to begin his performance. He had obtained the adhesion of several physicians, none members of the Academy of Medicine, but still of some repute, who had consented to act as a committee. They made, however, certain conditions to ensure perfect fairness and scientific accuracy, but Succi has not as yet given them full satisfaction.

DR. J. BÉCLARD, the secretary of the Academy of Medicine, has been elected Dean of the Faculty of Medicine, for three

years from November 18. M. Béclard, as is customary, is to keep, in the meantime, his chair of Professor of Physiology at the Faculty.

CANDIDATES FOR THE MEMBERSHIP OF THE ACADEMY OF MEDICINE.—M. Marty, the well-known military pharmacist, at the last meeting of the Academy presented his claims as a candidate for the vacancy in the section of pharmacy caused by the death of Dr. Mialhe. For the seat of academician-at-large, now vacant also, five candidates, so far, have come forward, namely Messrs. Blache, Corlieu, Galezowski, Péligot, and Worms.

PUBLIC OPINION FAVOURS PHARMACISTS.—At the general congress of syndical chambers just held in Paris, some more or less radical resolutions were adopted—in a Platonic or Pickwickian sense, it must be admitted, since they have no legal force. But a resolution declaring that grocers and herbalists should be allowed to sell all simple drugs, of any sort and in any quantity, was unanimously voted down by the congress.

THE PROPOSED NICKEL COINAGE.—The Bill presented by M. Alfred Letellier, now before Parliament, provides that the new coins shall be made with an alloy, composed of 25 per cent. of nickel and 75 per cent. of copper. They are to replace the bronze pennies now in circulation, which—thirty years ago considered an improvement—are now thought too cumbersome for our effeminate period. The weights would be 4.5, 3.5, and 2.5 grammes, and the diameters 24, 22, and 20 millimètres for the 20, 10, and 5 centime pieces respectively. In other words, the two-penny coin would weigh (in round figures) 70 grains, and have a diameter of 1 inch; the penny, 55 grains and nine-tenths of an inch; and the half-penny, 39 grains and eight-tenths of an inch. The alloy, well-known and appreciated in America and Belgium, is almost silver-white, and remains clean when circulated. Various models of the new coin were presented to the Chamber of Deputies.

NEW SITUATIONS FOR ANALYSTS.—In accordance with a law recently passed, President Grévy has issued a decree ordering that a chemical laboratory shall be organised in connection with the Custom-house at Guadeloupe, West Indies, for the purpose of regulating the exportation of cane-sugar. There is to be a head chemist, at a salary of 10,000f. a year, with a preparator at 3,000f. For office expenses 400f. to be allowed yearly; 10,000f. are granted for the purchase of chemical balances, polarimeters, platinum capsules, glassware, tables, and apparatus in general. For the maintenance of the same, fuel, water, &c., 4,000f. a year; rent, 1,500f. a year; and, finally, 1,000f. are allowed for adapting the building to the purpose of a chemical laboratory. The same provision is made for a like laboratory at Martinique, with like salaries and appropriations. Each colony is to pay its new laboratory and analysts out of its own revenues. Nobody will say the French Republic is unmindful of its chemists. In those places where a five-franc piece looks, as it were, as large as a cart-wheel, here are four snug positions for young chemists with good connections. And the best of it, the colonies will foot the bills.

INTERFERING WITH CHEMICAL INDUSTRIES.—A Bill, presented by M. Salis to the Chamber of Deputies, and now coming up for discussion, will, if passed, somewhat interfere with manufacturers of aniline colours. The Bill (1) formally prohibits the manufacture and sale of all colouring matters or substances intended for artificially colouring wines; (2) enacts for so doing, as penalty, a fine of from 100 to 5,000f., and an imprisonment of fifteen days to two years, together with publication of the conviction in several papers; and (3) directs that a ministerial order shall determine which are the forbidden colouring matters, in conformity with a list to be drawn up every six months by the Consulting Committee of Public Hygiene.

HELP FOR CONVALESCENT HOSPITAL PATIENTS.—The city of Paris has been given by will an important sum to be used for benevolent purposes. Mme. Laborie, a widow, has left a bequest of 800,000f. (32,000*l.*), the income of which is to be distributed, in small sums of 1*l.* each, to indigent patients on their leaving the Vincennes Asylum. Every one acquainted with the helplessness of most patients just discharged from a hospital will approve of such intelligent charity.

Practical Notes and Formulae.

MEASURING LIQUIDS.

By A. A. BARRETT, Phar. Chem.

FOR measuring bulky liquids a very useful measure can be constructed out of an ordinary pottle bottle. Select one with a wide mouth and paste a strip of paper on it, back and front. Graduate it by pouring in pints or half-pints of water, as may be desired, and carefully mark with a pen the height of each successive addition. When filled, allow the paper to dry; size it, and varnish it, and you will then have a useful tool costing only a shilling, which having once used you will never again want to be without. A wide-mouthed bottle is selected because it can be emptied so much more readily than one with a narrow mouth.

In preparing decoctions, according to the directions of the old Pharmacopœias, we are directed to boil down to a given volume. This is easily managed with only one measuring. Suppose we have to boil down a decoction of tritium repens to a pint. Place the tritium in the pan and pour on a pint of water. Now stand a glass rod vertically in the centre of the pan, notice the height the liquid reaches to, and attach a piece of gummed paper to the rod, so that its lower edge touches the liquid. Add the remainder of the water and boil. You can ascertain at any moment whether the boiling is complete by inserting the glass rod.

SEDATIVE COUGH MIXTURE.

Potassii citratis	3i.
Succi limonis	3ij.
Vin ipecac.	3ij.
Syr. simplicis	℥iiss.
Aq. chloroformi	3ij.
Aq. ad	3vi.

fiat mistura.

A tablespoonful four to six times a day.

LINIMENTUM TEREBINTHINÆ.

WIDELY differing preparations under this name have been turned out by various makers, but the differences have been in most cases traced to, and are generally acknowledged to have been caused by, the use of turpentine of various ages, and consequently of different degrees of oxidation. As turpentine ages it resinifies, thickens, and becomes acid; brought in contact with soft soap an acid resinote of potash is formed which does not give a perfect solution with the turpentine, but a thick, extremely soft, gelatinous emulsion, attractive in appearance, but which should not be dispensed as the official article. A fresh turpentine with either the official or commercial soft soap gives a thin, syrupy, opaque liniment, the opacity of which varies in some slight degree through differences in the amount of water in the soaps. Soft soap is known to be hygroscopic, and may even be characterised as deliquescent, for, as ordinarily kept, it is generally covered with a more or less fluid portion. If it be used in this state the resulting liniment will have a quite opaque or milk-like character. This, again, is not the official liniment, and the lesson it teaches is not to use a deliquesced soap.

There is just one feature of the official instructions with which fault can be found, particularly when making this liniment on a large scale. The soap, amounting to 2 solid parts, is directed to be mixed with 2 fluid parts of water—an operation by no means easy, and entails great loss of time. Working either on the large or small scale, we find that by dissolving the camphor in the turpentine, adding the soap and water, then shaking the mixture well a few times during twenty-four hours, the result is as satisfactory as it can be obtained.

If the liniment is made, as it should be, with the B.P. soft soap, it will have a green colour; the commercial soap imparts a pale yellow.—A. W. G.

RED INK.

AN ink which does not corrode steel pens may be made by the following formula:—

	Oz.
Cochineal	$\frac{1}{2}$
Gum arabic (in powder)	$\frac{1}{2}$
Potass. tart. cryst.	1
Aqua distill.	8

Make a solution by boiling for a few minutes, filter, and add

Burnt alum.	2 drachms
Oil of cloves	4 minims

CHRYSAMIN.

THIS colouring matter possesses, besides the remarkable property of dyeing cotton a bright yellow without the intervention of a mordant, one or two peculiarities of interest. Cotton dyed with chrysam in and then in a solution of malachite green assumes a full shade of green, which is characterised by its great brilliancy. A similar shade is obtained by using methylene blue in place of malachite green. When topped with safranin a scarlet is obtained which is quite equal in brilliancy to Turkey red (yellow shade) or crocein scarlet. Magenta yields an equally brilliant shade of crimson. As to the effect of temperature in dyeing these mixtures, in the cold brilliant effects are produced; while if the solution is heated, the colour gradually loses its brilliancy, and a dull, worthless shade is the result. Experiment has shown that these different results are due to chemical change. Chrysam in produces various shades with metallic salts. Potassium bichromate, copper sulphate, and ferrous sulphate all deaden the original yellow, ferrous sulphate yielding a light brown somewhat similar to a catechu brown. Lime water yields an orange.

SPICED CATTLE-FOOD.

LOCUST-BEAN meal, 6 cwt.; Indian meal, 10 cwt.; linseed-cake meal, 3 cwt.; sulphur, 1 qr. 12 lbs.; saltpetre, 1 qr. 12 lbs.; common salt, 1 qr. 2 lbs.; fenugreek, 20 lbs.; gentian, 10 lbs.; sulphate of iron, 5 lbs.; aniseed, 4 lbs.; ginger (ground), 3 lbs.; total, 20 cwt. 1 qr. 12 lbs.

TO REMOVE THE ODOUR OF BENZINE.

THE disagreeable odour of benzine can be removed by shaking repeatedly with plumbate of soda, made by dissolving oxide of lead in caustic soda, and rectifying. Simply shaking with charcoal and filtering will partially remove the odour.

CEMENT FOR BOTTLES.

A CEMENT for bottles containing very volatile liquids, which is easily prepared and applied, and which is said to prevent the escape of the most volatile liquids, is composed simply of very finely-ground litharge and glycerine; and it is merely painted around the joint between the bottle and the cork or stopper. It quickly dries, and becomes extremely hard, but can be easily scraped off with a knife when it is necessary to open the bottle.

TO REMOVE NITRATE-OF-SILVER STAINS.

DIP the fingers into a strong solution of cupric chloride. In about a minute the silver will be converted into chloride, and may then be washed off with hyposulphite-of-soda solution.

WRITING AND COPYING INK.

THE following process has been communicated by Dr. Kayser to the Bavarian Museum of Mechanical Arts:—Logwood chips are boiled in soft water until the decoction has a specific gravity of 1.028. Ten parts of bichromate of potassium are dissolved in 1,000 parts of water, and to the solution are added 100 parts crystallised sulphate of aluminium, 200 parts of glycerine, and 100 parts of sugar. The solution thus made is brought to a boiling-point and added to 10,000 parts of the logwood solution. The addition of 100 parts of a 50-per-cent. solution of acetic acid in water completes the process. The fluid is allowed to stand for seven days, when it will be found to have settled completely.—*National Druggist*.

Foreign and Colonial.

THE PRODUCTION OF THE "SENEGAL" GUM ARABIC.—The "Senegal" gum of commerce is found in the territory of the tribes inhabiting several oases between the Senegal and the Atlantic Ocean; the largest forest gum trees are those of Sabel-el-Tatack and El-Illebar; the former produce the white gum, which is most valued; the other the grey and red varieties. The acacia trees which grow in the desert are inferior to and have a more crooked appearance than those growing near the river, where the soil is more favourable for vegetation. The acacia of the desert rarely attains a height of more than 30 feet, and it has the shrivelled appearance which is peculiar to vegetation in these regions, which are exposed to strong winds. In Western Africa there are only two seasons, the rainy and the dry one. The nearer to the equator, the longer the duration of the rainy season. In Senegambia it lasts two months and is preceded and followed by a month of tempest. In November the bark of the gum trees cracks in numerous places and the gum exudes. About this time the hot winds begin to blow and the burnt trees lose their leaves, assuming the appearance they have with us during the winter. The gum dries quickly, outwardly it looks dull, but on breaking it it is brilliant and shiny; it becomes very transparent if put into the mouth for an instant. About a month is required to make the tree produce its full crop. The natives then prepare for the gathering in, and the whole tribe, men, women, and children, some on foot, others on horseback, proceed to the forests. A camp is established for the duration of the crop, and all set to work. The gum collected is placed in sacks of tanned bullock hide, which are fastened by twos to the backs of camels and bullocks. The work is done slowly, there being no fear of rain; when finished, the whole tribe return, and proceed towards the banks of the Senegal, which are at a great distance from Fort Louis. The merchants come to Galam, a small station situate about 1,000 kilometres from St. Louis on the Senegal, and there wait for the tribes and their crop of gum, which is generally paid for in printed calico, which the collectors resell in the interior.

BOTANICAL EXPLORATIONS IN COSTA RICA.—The district of Chirigui in Costa Rica, whence the bulk of the so-called Jamaica sarsaparilla comes, was lately explored by an English botanist, who gives an interesting account of his journey in *The Gardeners' Chronicle*. Among other things he mentions finding an ananaceous plant, probably a *Hylepia*, exhaling a perfume very like that of *Cananga odorata* (ylang-ylang), and a tree known as the "samba gum tree," which yields on incision a creamy-looking yellowish sap, which after a time becomes hard and resinous and then resembles the tenacious bog gum of Jamaica, the produce of *Symphonia globulifera*. He also met with a thin-coated cocoon one-third larger than the ordinary kind, and which he thinks deserving of cultivation. The natives ornament their cheeks with paint made among other things from an oleoresin resembling elemi, yielded by a tree called "pontapée." This paint is prepared by burning the oleoresin and collecting the lamp-black, a purpose for which it is doubtless well adapted.

PETROLEUM IN JAVA AND SUMATRA.—Guided by careful observations, the Dutch Government have reasonable ground for supposing that Java, Sumatra, and other islands of the Indian Archipelago possess large deposits of petroleum, which could be profitably worked. An engineer in the Dutch-Indian Civil Service, Mr. A. Stoop, has accordingly been instructed to visit the head-quarters of the American petroleum industry in the United States and Canada, in order to gain information concerning the working of petroleum springs.

THE SALT MOUNTAIN OF PALESTINE.—U.S. Consul Merrill states that this mountain is situated at the south end of the Dead Sea. Its length is six miles, width three-quarters of a mile, and height not far from 600 feet. The mass of the mountain is composed of solid rock salt, some of which is as clear as crystal. How far this deposit of salt extends below the surface the ground no one at present knows. This salt and that obtained from the Dead Sea are a Government monopoly. Consul Merrill believes there is a mine of wealth in the mountain, and if capitalists were allowed to work it, the prosperity of the country would be greatly increased.

PHARMACEUTICAL EDUCATION IN JAPAN.—In the report recently issued by the medical faculty of the Tokio University (Tokio Daigaku), the following passages occur with respect to pharmaceutical education in Japan. The Tokio University, which was originally an advanced school only, was founded in 1869. Its university title dates from 1877, when the existing medical school was incorporated with it. The university possesses four faculties—that of law, mathematics and physiology, letters, and medicine. The faculty of medicine numbers three different classes of students—the medical students of the first class, those of the second class (*hekikai gaku*), and the pharmacists. A youth who purposes to qualify himself for a pharmaceutical career must enter the faculty at the age of eighteen. His studies extend over three years, and at the end of that period he receives the diploma qualifying the holder to practise the art of pharmacy. The annual course at the university is divided into winter and summer courses. The former commences on December 1 and runs on until March 31, and the summer course lasts from June 1 until November 30. The holidays in the first course are a fortnight, in the second two months.

The lectures commence at 7 A.M. in summer and 8 A.M. in winter, and are from eighteen to twenty hours weekly. At the end of each course examinations are held, which the student must pass if he is to be admitted to a higher class. The lectures are given in the German language, and most of the books used are in the same idiom.

The teaching comprises the following branches:—Physiology, six hours weekly during the first course; botany, three hours weekly in the first and six in the second course; inorganic chemistry, nine hours in the first course; zoology, three hours in the second course; mineralogy (as a substitute for botany), three hours weekly; organic chemistry is one of the principal branches, and taught up to nine hours weekly.

In the third course the students commence to learn the materia medica (six hours weekly) of Japanese and foreign drugs, while chemistry is specially adapted to pharmaceutical purposes. The last part of the student's university education is taken up by pharmaceutical preparations, dispensing practice, and the testing of medicinal preparations.

DISCOVERY OF COBALT MINES IN QUEENSLAND.—Cobalt ore has recently been found near Kilkivan, in the Wide Bay District of Queensland. The ores of this metal were hitherto unknown in the colony, although the neighbourhood of Kilkivan was known to be rich in mineral products, including gold, silver, copper, mercury, and lead. Mr. F. Smith, who discovered the deposits under notice, reports that they come under the designation of earthy cobalt, and were mixtures of cobalt, nickel, iron, manganese, and copper, in somewhat variable proportions. They are ten miles distant from Kilkivan itself; the reef or lode of the ore now being opened is situated in one of the spurs near the heads of the Wide Bay Creek, and between the tributaries of that watercourse known as Fat Hen and Copper Mine Creek. The reef measures 21 feet in thickness, but it is not claimed that the whole of this is cobalt ore of the best quality. It is said that the Queensland ore contains no less than 22 per cent. of cobalt, which, if true, would render it more valuable than any other cobalt now in the market, as the average yield of the commercial cobalt does not exceed from 2 to 10 per cent. Cobalt is a mineral of which the price, to a great extent, depends on its supply, and the latter has hitherto been small; but no doubt with a greater output fresh uses for cobalt will be discovered and the mineral become more valuable. The existing statistics of the production of cobalt in many cases give the ore as of nickel and cobalt. In the United States, in 1882, the value was 3,000*l.*, but the quantity raised was not stated. In Germany, in 1881, the statistics gave 191 tons, value 13,005*l.*, equal to 68*l.* per ton; in Spain, in 1882, 40 tons, value 1,046*l.*, equal to 26*l.* per ton; in Norway, in 1879 108 tons, value 11,112*l.*, or 103*l.* per ton; and finally Sweden produced an average quantity of 153 tons per annum during ten years. The value of the ore of nickel and cobalt was given variously as from 40*l.* down to 4*l.*, according to quality and locality. Kilkivan is situated in the Wide Bay district of Queensland, to the north-west of Brisbane, at about 26° S. Lat. and 153° W. Long. The Kilkivan branch of the Maryborough and Gympie Railway, which is about to be completed, will open up the district to commerce.

Trade Report.

It should always be remembered that prices quoted in this section are as nearly as can be ascertained the lowest that are actually paid for bulk quantities. Considerable allowances have to be added in many cases before ordinary prices can be ascertained, and for many drugs it must be recollected the range of quality is very wide.

MINCING LANE, November 25.

ACID (CITRIC) flat at 2s. 0½d. per lb.

ALOES.—A consignment of 54 gourds *Barbadoes* aloes was offered in sale, and a part sold at 80s. per cwt. for fair quality. Of *Cape* aloes 144 cases were offered, about one-half of these selling at slightly easier rates; viz., 27s. to 25s. for good to fair, but somewhat soft, and down to 14s. per cwt. for very low quality. *Curaçao* are plentiful. The parcels offered included 20 boxes good to very fine pale liver, which sold quickly at 6l. 7s. 6d. to 5l. 15s., but the rest was of poor quality. 655 gourds sold at 41s. to 53s. per cwt. Good *Zanzibar* aloes are held at 110s. per cwt., and fine dry *Socotrine* at 160s. per cwt.

AMBERGRIS.—Some good quality, mostly whitish in colour and of good flavour, sold at 69s. to 70s. per oz., not dear, and a small quantity, low grade, at 10s. 6d. per oz.

ANTIMONY.—Crude *Japanese* is still neglected, 16l. being the current quotation.

ARAROA.—The 10 cases previously described were again offered to-day, and holders professed anxiety to realise.

ARGOL.—It is reported from Genoa that the Italian vintage has been an abundant one, yielding 35½ millions of hectolitres. The prices of tartar materials are expected to be influenced by this result.

BAEL FRUIT.—Sales were made without reserve at 1¼d. to 1½d. per lb.; and some fair dry quarters were bought in at 3½d. per lb.

BALSAMS.—Holders of *Copaiba* evince no anxiety to meet the market, being evidently of opinion that higher prices will shortly be obtainable. Some good thin *Pará* is held at 1s. 10d. per lb., while fair *Maranhão* was bought in at 2s., which is above present value. Privately 1s. 10d. to 1s. 11d. is quoted for fair balsam. *Peru* may be bought in quantity at 4s. 9d. per lb., but there is no demand. The Hamburg market is again reported weaker. Forty-eight cases *Tolu*, mostly of soft quality, were offered, but found no purchaser. Holders ask 1s. 4d. to 1s. 5d. per lb.

BAY RUM.—Two cases from *Dominica* are held at 4s. per dozen bottles (in bond).

BUCHU LEAVES.—For some dull long narrow leaves, slightly mixed with flowers, 6½d. was refused, while 4 bales round leaves sold at 3½d. to 4d. per lb.

CALUMBA ROOT.—The market continues to be well supplied, but mostly with root of inferior quality. In sale 26s. was paid for good pale root, mixed with small, 22s. for fair, and 17s. 6d. to 18s. for dull wormy and dusty root. Our stock at the beginning of the month was 1,497 bags against 994 bags last year, but has grown during the last few weeks.

CAMPHOR.—About 200 tubs *Japanese* camphor were offered to-day, about one half of these selling, partly without reserve, at 65s. per cwt., with good competition.

CANNABIS INDICA.—A small parcel of 12 bales good greenish dusty tops sold at 3d. per lb., a rather better price.

CANTHARIDES.—An offer of 6s. per lb. for 2 casks dull *Russian* was refused, while some good sound *Chinese* flies sold at 4s. 6d. per lb.

CARDAMOMS.—The supply of 198 boxes was fairly representative. It included some very fine pods, which sold at a renewed advance, while seeds realised much higher prices, but the low class cardamoms show no change for the better. The following prices were obtained:—*Mangalore*, good smooth bold clipped, 3s. to 3s. 1d.; fair ditto, 2s. 6d. per lb. *Ceylon-Malabar*, bold pale heavy to smaller, 2s. 6d. to 2s. 2d.;

good medium-sized yellow, 2s. to 1s. 11d.; ditto brown, 1s. 10d.; small pale to brownish, 1s. 6d. to 1s. 4d.; long pale, 9d., and ordinary shelly, 6d. per lb. *Aleppey* character, small unclipped shelly, 8½d. to 7d. *Tellicherry*, fair to small brown unclipped, 10½d. to 4½d.; seeds, 1s. 4d. to 1s. 9d. per lb.

CHIRETTA.—1¼d. per lb. paid for 46 bales of inferior quality.

CINCHONA BARK.—A fairly large assortment was included in the drug auction, and small sales were made of fair pale quill *Lima* at 6½d.; an odd lot of very common *Maracaibo* at 1d. per lb.; *Guayaquil* at 6d.; and fine flat yellow *Calisaya* at 2s. 2d. for sound to 1s. 2d. for badly damaged. 28 bales *Java*, rather weak, long quill, were bought in at 1s. 1d.; very long silvery ditto at 1s. 3d. per lb. A correspondent writes:—Some fifteen years ago experiments were made to grow cinchona at Singapore, but the young plants would not flourish, and the attempt was abandoned. In some of the protected States, for instance Perak, cinchona is grown, but whether it will become a profitable product is doubtful. Some of the planters who have ground from the Sultan of Johore have also planted cinchona. Of these places, Perak, which is a protected State in the Malay Peninsula, is as yet the only one which can have trees fit for barking. The Hon. Sir Hugh Low has done much in promoting cinchona cultivation in Perak.

CIVET.—Five horns pale quality, fair flavour, were bought in at 6s. 6d. per lb. nominally.

COCA LEAVES show no improvement whatever. Four bales, mostly sea-damaged, *Huanoco* leaves sold at 8d. to 8½d. per lb. From Hamburg the article is reported decidedly firmer, the stock at that port having within the last fortnight been diminished by 15,000 kilos, partly for German and partly for American consumption.

COLOCYNTH.—Two cases immatured *Spanish* apple sold at 3½d. per lb.

CUBEBS are again firmer, 18l. having been paid privately, it is said, for fine genuine berries. In drug sale 3 packages were taken out without quotation.

CUSCUS GRASS.—31 barrels good palish quality remained unsold.

ELATERIUM.—The price of 2s. 6d. per oz. is asked for fair greenish *Malta*.

ERGOT OF RYE.—45 bags *Spanish* ergot were offered, but none was sold except 4 bags wormy but sifted quality, which fetched 7d. per lb. Holders appear unwilling to accept lower values, which it is thought must rule before long, the supply of new crop *Spanish* ergot being in excess of the demand.

GALANGAL ROOT.—180 bags bought in nominally at 10s. per cwt.

GALLS (TURKEY).—The market is dull. We hear of some small private transactions in *Blue Bassorah*, at 59s. to 60s. per cwt. *Green* are quoted at 55s., and *white* at 54s. per cwt., but these varieties are but little inquired for.

GLYCERINE very firm. *German* 1,260 s.g. held at 85l. by the maker's agents, and at 75l. by second-hand holders.

GUINEA GRAINS remain dear, although the article appears to have passed the highest point. In sale, 21s. was paid for good bright seeds; 20s. per cwt. is demanded for 30 bags, of rather stony description.

GUM AMMONIACUM.—54 cases placed in auction were all sold, holders appearing anxious to rid themselves of this old stock. Good palish drop brought 34s., a comparatively full price, and fair loose drop mixed with dust to slightly seedy yellow ditto, 29s. to 25s. Siftings sold extremely cheap, at 8s. 6d. to 5s. for fair to common. At the beginning of the month our stock was 250 chests, against 179 in 1885.

GUM ARABIC.—At the last auctions prices ruled very irregularly, common *Amrad* and *Oomra* gums selling at a heavy decline, in some instances 15s. per cwt.; while fine *Amrads* were but very slightly lower than before. In *Barbary Gum* we do not hear of any further business, but 110s. to 120s. is the value for ordinary to good gum, according to quality. In *Ghezira* and *Talca* buyers are holding off, and we do not hear

of any transactions. The market for *Senegal* is unchanged, *Bas du Fleuve* is quoted 6*l.* 7*s.* 6*d.* to 6*l.* 10*s.*, according to quality, and for *Galam* 6*l.* 5*s.* is asked. In *Turkey Sorts* we do not hear of any transactions at all. In drug sale 11*l.* 12*s.* 6*d.* was refused for some fair sorts.

GUM BENJAMIN.—Ten cases fine *Siam* gum, partly loose, partly blocked almonds, were shown and bought in at 26*l.* per cwt. Dull grey badly false packed *Penang* seconds sold at 5*l.* 12*s.* 6*d.*, and fair almondy ditto at 7*l.* 7*s.* 6*d.* 7*l.* 17*s.* 6*d.* to 8*l.* 5*s.* was paid for fair II. *Sumatra*, falsely packed at the corners.

DRAGON'S BLOOD.—Three cases dark coloured old stuff in reed realised 6*l.* 10*s.* to 6*l.* 15*s.*

GUM ELEMI.—Ten cases inferior block were knocked down at 10*s.* per cwt.

GUM GALBANUM.—One case sold at 1*s.* 0½*d.* per lb.

GAMBOGE.—Out of 8 cases offered, 2 cases good coloured loose fragments sold at 10*l.* 5*s.* per cwt.

GUM MYRRH.—Neglected. 42 cases, including some fine pale *Aden* sorts, were offered, but no sales ensued. Values remain as before, 6*l.* 15*s.* to 7*l.* 10*s.* for very good to fine bold pale *Aden*; 7*s.* for good siftings. At the beginning of the month our stock was 465 cases, about double that of last year.

GUM TRAGACANTH.—In public sale on November 19, 325 packages were offered, of which a part was sold at the following rates:—*Syrian*—thirds, 5*l.* 15*s.* to 6*l.* 10*s.*; fourths, 4*l.* to 5*l.* 10*s.*; pickings, 3*l.* 15*s.* to 5*l.* 2*s.* 6*d.*; common dark, 1*l.* 10*s.*; siftings, 4*l.* 15*s.* to 5*l.* The lots bought in included, *Turkish*, at 5*l.*; *Syrian*, fourths to firsts, 5*l.* 15*s.* to 9*l.* 10*s.*; *Hog*, at 25*s.* to 80*s.* In this day's drug sales dull heavy stout *Bagdad* realised 80*s.* to 85*s.*; while 9*l.* 15*s.* was refused for fine white.

HONEY.—A total of 405 packages was placed in sale to-day, the bulk being old stuff which holders appeared anxious to realise. Sales were made of *Chilian*, dull old pale, at 18*s.* to 19*s.* 6*d.*; and of *Californian*, at 22*s.* 6*d.* to 23*s.* 6*d.* for fair thick pale, 18*s.* 6*d.* to 19*s.* for fair buff, 17*s.* for dull ditto, and 11*s.* to 12*s.* for common brown. The first shipments of Canadian honey have recently been made to Liverpool, put up in 10-lb. and 60-lb. cans. The white clover honey, from the Ontario apiaries, is said to be superior to the best extracted Californian product, and a large demand has sprung up for it in America, where it has realised from 9*c.* to 11*c.* per lb. It is stated that in one of the Ontario bee districts alone the yield this year is equal to about 1,200,000 lbs. of extracted honey. From the inauguration of this export trade in bee-products important results are anticipated in Canada.

IODINE has declined to 6½*d.* per oz., but this decline has not as yet influenced the prices of the iodides, the manufacturers of these articles being full of orders. *Potassium iodide* is quoted at 8*s.* 6*d.*

IPÉACUANHA about 1*d.* per lb. cheaper, but there was little offering, 2*s.* 11*d.* to 3*s.* 3*d.* was paid for rather woody to fairly well annulated root, and 3*s.* 11*d.* for fair short selected.

IRISH MOSS.—Ten bales fine pale quality were bought in at 40*s.*, but for the whole parcel a good deal less would, no doubt, be taken.

JALAP.—Small sales of mixed *Vera Cruz* at 6½*d.* per lb.

KAMALA sold at 5½*d.* to 6*d.* per lb., rather an improvement.

KOUSSO.—Twenty-eight bales were to-day offered without reserve, and sold cheaply at 5½*d.* to 6½*d.* per lb. for fair to good brown flowers in bundles.

LIME JUICE.—None was sold, but plenty raw *West Indian* juice offers at 1*s.* 3*d.* per gallon.

LIQUORICE ROOT.—Two bales very ordinary tasteless root realised 5*s.* per cwt., while 40*s.* was suggested for good bright deccat'ed root.

MUSK.—Some arrivals have been received during the last few days, and in sale to-day a rather larger quantity was offered than was anticipated. Notwithstanding this prices improved greatly, *Tonquin*, *Pile 1*, being especially well competed for, and selling at 3*s.* 6*d.* to 4*s.* advance in some

instances. The following prices were paid: *Tonquin*, *Pile 1*, medium to bold pods, slightly damp, but well trimmed, with underskin, 72*s.* 6*d.* to 75*s.*; fairly dry rough ditto 77*s.*; small to bold, very broken, dark coloured pods, with underskin at 68*s.* to 69*s.* 6*d.* per lb.; good but false packed, *Pile 3*, 36*s.* to 42*s.* 6*d.*; *Cabardine*, Russian, rather juicy, 14*s.* 6*d.* for a quantity; *grain* 15*s.* 6*d.* to 41*s.* per oz.

NUX VOMICA in good supply, but neglected. Quotations for sound vary from 7*s.* to 11*s.* 6*d.*, according to quality. Stock on 1st inst., 1,184 bags against 739 last year.

OILS (ESSENTIAL).—The market has been very quiet, and there are hardly any alterations to report, although a movement is anticipated early next month. *Almond*.—In drug sale 6 bottles bought in at 10*s.* per lb. *Aniseed*.—6*s.* 4*d.* is asked for a parcel of good China star. *Bergamot* in fair request at 5*s.* 9*d.* to 6*s.* per oz. *Cassia*, good sweet unworked bought in at 3*s.* per lb. For 10 cases good *Cinnamon leaf* an offer of 1½*d.* per oz. was refused. *Citronella* held at 1½*d.* per oz., at which price no buyers appeared. *Lemon* sells at 4*s.* 9*d.* for inferior quality. *Limes*.—1 case *Dominica* sold at 5*s.* per lb. *Opoponax*.—Sales of small quantities of this essence have been made through the week at 96*s.* per oz., and more can be had at the same price. Appearance and odour of this parcel are excellent. *Orange*.—The new crop is now arriving, and holders of old stock will in all probability have to accept lower prices soon. *Otto of Roses* is still quoted at 25*s.* per oz. for fine quality. *Peppermint*.—15*s.* 3*d.* was refused for 3 cases, offered as HGH brand, which are held at 15*s.* 6*d.* per lb., while 4 cases *McK&R* brand were bought in at 14*s.* without offer. One jar fair but rather damp menthol crystals sold cheaply at 5*s.* per lb. *Ylang-ylang*.—Some parcels were offered in drug sale, and bought in at 10*s.* per oz. A private holder of fine oil, "Sartorius" brand, asks the extreme price of 22*s.* 6*d.* per oz.

OIL (COD-LIVER).—Four casks of 40 gallons each, fair yellow *Newfoundland* of somewhat sharp taste were sold without reserve at 2*s.* 3*d.* per gallon, bidding commencing at 1*s.* We call attention to a letter on the position of cod-liver oil appearing in our correspondence this week. We shall probably take occasion next week to again refer to the subject.

OILS (FIXED).—Eight tins oil of sweet *Almonds* held at 9*d.* Fine *Dalmatian Castor* bought in at 4¼*d.*, and second *Calcutta* ditto at 2¼*d.* per lb.

ORANGE PEEL quite neglected. Good bright *Seville* ringlets held at 9*d.* per lb.

POTASSIUM BROMIDE and all other bromides are 1*d.* dearer owing to the combination in America, and the market for these articles is a very strong one.

QUASSIA WOOD neglected; 120*s.* per ton is the nominal quotation.

QUICKSILVER is now quoted at 7*l.* 5*s.* by the importer, and in second-hand at 7*l.* 3*s.* 6*d.*

QUININE (SULPHATE).—We understand that *German* in bulk (BS) has sold at 2*s.* 2*d.* in second hand, and that a parcel of the CZ brand in one-kilo, tins has been offered at 2*s.* 1½*d.* per oz. The market closes very firm however. Messrs. Howards are unwilling to sell, and second-hand holders are able to obtain the official prices—2*s.* 8*d.* for bottles, and 2*s.* 6*d.* for bulk.

RHUBARB.—The supply was large, amounting to 182 chests, principally high-dried root; but only a few cases were sold, mostly at unchanged rates. *Shensi*, fairly good small round druggists' root, somewhat unsightly in coat, fetched the extraordinary price of 3*s.* 10*d.* to 3*s.* 11*d.* per lb., quite double the valuation; wormy bold round orange-coated *Shensi* sold at 1*s.* 5*d.* per lb. *High-dried* root sold as follows:—Bold to good pale, 11*d.* to 10½*d.*; wormy medium sized, 8*d.* to 8½*d.*; common spongy and wormy, 7½*d.* per lb.

SARSAPARILLA.—A fair business is reported for forward delivery, but in sale to-day prices were slightly easier both for *Honduras* and *Jamaica*, of which latter variety a large quantity was catalogued. The sales include: Good grey *Jamaica*, all more or less damaged, 1*s.* 7*d.* to 1*s.* 9*d.*; sound, 1*s.* 10*d.*; badly damaged ditto, 1*s.* 1*d.*; fair *Honduras*, 1*s.* 5*d.*; *Guayaquil*, 10*d.* to 1*s.* 1*d.*

ANISEED.—*Russian* is steady, and as the quotation for new seed, viz. 24s. to 25s., is a low one, many buyers are laying in stock at the present rate. A parcel dull seed, rather mixed with earth, stalk, and coriander, was offering yesterday at 24s. 6d. per cwt. *Turkish* anise is held at 30s. to 32s., while 52s. is paid for *Spanish* (Alicante). Of *Chinese* star anise 63 bags were offered, but all bought in at 80s. to 90s. nominally.

ANNATTO SEED.—11 bags fair but crushed *Ceylon* sold at 3d. per lb.

CANARYSEED has been exceedingly firm during the last fortnight, and previous prices were fully maintained. No new supplies came to hand from *Turkey*, and it is reported from Constantinople that within the last few days about 8,000 bags were sold there for shipment at 55s. to 60s. per 464 lbs. The destination of this seed can hardly be any English port. In *Morocco*-seed greater activity has prevailed, its present price of 54s. to 55s. per 464 lbs. being very moderate compared with the latest prices for *Turkish* seed, which we must set down at 53s. to 53s. 6d. From *Holland* fair quantities of seed have been imported at 55s. to 55s. 6d. for small grained, and 60s. to 61s. for bold seed. Of home-grown seed only very small parcels are being offered, not sufficient to influence markets. In *Sicily* and *Algeria* values are still too high to allow of an import trade to this country.

CARAWAYSEED.—The article is quiet, dealers being supplied for some time to come, and not inclined to speculate at the present range of prices. In *Holland* a great deal of this year's crop is still in farmers' hands, ready to come out as soon as a better inquiry sets in. 36s. to 37s. is the nearest value for *Dutch* seed on our market.

CROTON SEED is in good supply and sells well at steady rates; viz., 30s. 6d. to 31s. for good *Ceylon*, and 24s. to 26s. for common to dark *Bombay*.

CUMINSEED maintains its price of 42s. per cwt. for *Multese*; 27s. for *Greek*; and 28s. for *East Indian* seed.

FENNEL SEED is continuously inquired after, and supplies are short. *Lecantine* quality realises 20s.; *European*, 27s. per cwt.

FENUGREEK.—Fresh supplies from *Morocco* have come to hand, and there is also some *East Indian* seed on the road. 8l. to 8l. 10s. per ton are current values.

LINSEED commands a brisk sale at a slight advance for finest qualities. *Sicilian*, 50s. to 52s.; *Canadian*, 52s. 6d.; *Dutch*, 49s. to 50s.; fine *Bessarabian*, 45s. to 46s. per 424 lbs. Ordinary *Russian* seed sells at 40s. to 41s. *East Indian* descriptions very firm: *Bombay*, 44s.; *Calcutta*, 41s.

MUSK SEED—Eight barrels were offered in drug sale, but only 2 barrels *West Indian* sold at 5d. per lb. Good seed is worth rather more.

MUSTARDSEED.—*White* is very quiet; English at 10s. to 12s., foreign at 8s. to 10s. per bushel. English *brown* is quoted at 12s. to 13s. per bushel, whole. Trade in *Indian brown* seed is steady at an unaltered price.

SENNA.—A large supply was offered, the total amounting to 288 bales, and the bulk was sold at steady, but on the whole not dearer, rates. The bulk offered consisted of common to medium grades. We quote fair to good boldish leaf, 7d. to 8½d.; fair to good medium, 5½d. to 6¾d.; ditto slightly mixed, 4¾d. to 5½d.; small fresh leaf, 4d. to 4½d.; ordinary small mixed leaf, 2¾d. to 3½d.

SQUILLS selling slowly at 2½d. to 3d. per lb.

VANILLA.—115 tins were offered, of which the bulk sold at decidedly dearer prices, the advance being from 2s. 6d. to 3s. 6d. per lb., but the lots offered included some which had been on show at the Colonial and Indian Exhibition, and for which comparatively high prices were paid, viz., 22s. to 26s. for 7½ in. to 8½ in.

WAX (FISH).—Thirty-three cases fair *Japanese* squares sold at the very low price of 6s. 6d. per cwt.

WAX (VEGETABLE).—*Japan* remains unchanged at 52s. 6d. per cwt. for good whitish tablets.

THE AMERICAN MARKETS.

NEW YORK, November 12.

THERE continues to be quite an active distributive movement to supply the demand for home consumption, and for the season of the year business in the drug trade is reported to be much above the average. Export inquiry continues slack.

The prices sterling (in parentheses) are what the different articles would cost delivered in London, all market allowances, discounts, &c., being taken into account. Importers can therefore see at a glance the course of this market compared with their own.

ACETATE OF LIME.—The makers still hold out for high figures, so that up to the present no contracts have been made for next year. The price demanded is 10l. per ton c.i.f.

ALOES (CURAÇOA).—There is no cessation in arrivals; 100 boxes came to hand this week, for which 3½c. (17s. 6d.) is asked. It is noticeable that with the decline in price there has been a corresponding lowering in quality.

BALSAMS.—*Copaiba* still keeps moving upwards. *Pará* sold at 42c. (1s. 10d.). There is no *Maranhão* or *Maracaibo* offering, and *Angostura* is quoted 40c. (1s. 9d.). Stocks, in spite of being replenished from London, are getting greatly reduced. *Tolu* became a little weaker, on account of large arrivals from the South. These have now been all taken for consumption, and a firm feeling again prevails. Sales are reported at 38c. (1s. 8½d.). *Canada* is dearer again, 32c. (1s. 5½d.) being generally demanded for prime bright pure balsam.

COCA LEAVES are in large supply, and cheaper. Good green *Huanoco* are quoted 20c. (11½d.), while the light green *Truxillo* cannot find purchasers at any price.

ESSENTIAL OILS.—*Aniseed* is high here at present, being quoted \$1.75 (7s. 6d.). *Cassia* rules at 60c. (2s. 8d.). *Pennyroyal* neglected at 75c. (3s. 4d.). *Sassafras* unchanged, at 36c. (1s. 7½d.). *Wintergreen* steady, \$2.10 (9s.) in tins.

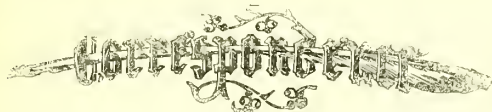
QUININE SULPHATE.—The improvement noted in our last report is well maintained, and in some quarters higher rates have been established. The official price of P. & W.'s make in ounces remains at 65c. (2s. 9d.). Prime German brands are 55c. (2s. 4d.), in 100-oz. tins.

ROOTS.—*Golden Seal* is getting scarce, and will probably be dearer; 20c. (11½d.) is asked for small lots, while no large parcels are offering. *Jalap.*—The holders here evince no desire to sell; the market is nominally 12c. (6¾d.) for prime, dark heavy. *Senega* neglected, but firmly held. *Serpentaria* quoted at 38c. (1s. 10d.).

SPERMACETI.—Large transactions have taken place, and the market is firmer. Very little can be had for prompt shipment; quoted 44c. (1s. 10½d.).

COTTONSEED OIL.—The small offerings of new summer yellow sell at 38c. (25l.), but the market is dull and inactive.

PEPPERMINT OIL.—This important article has advanced, and this year again the "bulls" have got the better of the "bears." It will now be seen how erroneous were the statements circulated about the size of the crop, and that there was no foundation for the assertion made in certain quarters that the production was double that of last year. To-day large transactions are reported to have taken place in the H. G. Hotchkiss brand at \$3.40 (15s. 6d.), and now \$3.50 (16s.) is asked. Stock on the spot appears to be scarce, while there are no sellers for future delivery. The farmers in Wayne county have held on to the great bulk of the crop, and will probably raise their price when they hear of the improvement here. Before this report appears in print the London and Continental markets must also have improved, but buyers cannot but admit that they were warned of the impending advance in this column. As to pure bulk oil in tins, it cannot be bought under \$3 (12s. 9d.) now, and will not long remain at this figure. Buyers should be very particular as to the brand of oil they buy this year, for never before in the history of the article was such mixing carried on as is taking place in Michigan this season. Reliable authorities state that with very few exceptions all the oil they have seen from that State has been tampered with, being wholly or partially dementholised, and in some cases mixed with other oils.



Memoranda for Correspondents.

Always send your proper name and address: we do not publish them unless you wish.

Write on one side of the paper only; write early; and devote a separate sheet of paper to each query if you ask more than one, or if you are writing about other matters at the same time.

If you send us newspapers please mark what you wish us to read.

Ask us anything of pharmaceutical interest: we shall do our best to reply.

Letters, queries, &c., not noticed in this issue will, if possible, be attended to next week.

The Pharmaceutical Society v. Widows.

SIR,—Permit me space in your most valuable journal to make a few remarks on the case which was contested at Warwick on the 16th instant. I believe it to be unfortunate for the Pharmaceutical Society that they should have singled out this particular business as the commencement of their crusade against widows—and the reason, perhaps, is known only to a few, to none better than myself. The proceedings were based on an infraction of the 15th section of the Pharmacy Act, which, the judge has ruled, is covered by the 16th section. Here is the widow of a F.C.S. and M.P.S. discharging the duties of executrix to her late husband's will, for the maintenance of herself and family, and it seems monstrous that she should be denied the same privilege as that of any other tradesman's widow. The principle of the foundation of the Pharmaceutical Society is to protect the public, and their interests in this case are cared for by two registered chemists, and so it appears more difficult to understand such vexatious persecution by demanding penalties (by return of post), apparently with the intention of recouping their exchequer.

I am, yours obediently,

Leamington Spa, November 17. E. A. HOLLOWAY.

SIR,—Your report of the case recently tried at the Warwick County Court—*The Pharmaceutical Society v. Judd*—will excite more than local interest. I am very pleased at the result, and I sincerely hope that, if the case be taken to a higher court, the present decision will be upheld.

It is within the range of possibility that my own family may be placed in the same position as that of the late Mr. Judd; and should that be so, and such an arbitrary prosecution should be again undertaken by the Pharmaceutical Society (which I think, by the way, might well direct its energy into other channels), I trust that the hearing of the case may come on before so common-sense and painstaking a judge as that of the Warwick County Court.

I cannot think what on earth possessed the Pharmaceutical Society to prosecute, or who instigated the prosecution. I have been accustomed for many years to regard it as a wise regulation clause in the Pharmacy Act that a widow or executors should, if they wished, conduct the business of a deceased chemist for the benefit of his family; and however the Pharmaceutical Society put aside the words of the statute which, his Honour the Judge remarked, were so simple, I do not know—possibly the Pharmaceutical Society does not know also.

So far as I can see, the whole of the conditions laid down in the statute have been observed, and chemists like myself who do not contemplate living for ever—at least, in this mundane sphere where chemists' businesses are carried on—will be glad to see this question settled once and for ever in their lifetime.

The number of chemists' families affected by this decision will not be small, and, without venturing my opinion in opposition to that of the solicitors for the plaintiffs, I think the Society will do well to let the case rest where it is, and that it will decide never again to venture upon the prosecution in a similar case, which, I am inclined to think, was one which might have been well let alone.

York, November 20.

EDWARD B. KENDALL.

Linimentum Terebinthinæ.

SIR,—I was under the impression that the lin. terebinth. question had been thoroughly sifted, but it appears from Mr. Conroy's paper, as reported in this week's *CHEMIST AND DRUGGIST*, that he has not yet succeeded in making a satisfactory liniment strictly in accordance with the B.P. (1885) process.

I prepared a small quantity about three weeks ago, using exactly the quantities stated in the B.P., the result being a splendid, perfectly liquid liniment of the consistency of new milk, with a slight yellowish-green tinge, which, up to the present time, has not shown the slightest indication of separating. I used *sapo mollis*, B.P. (fresh stock, and picked from the centre of the jar), ol. tereb. rect. (prepared by A. & H.), together with a good amount of patience and care.

The *modus operandi* was as follows:—Put the ol. terebinth. in the bottle with the camphor, and shake them together until the camphor is dissolved. Place the soft soap in a mortar; add the water gradually, and rub them together until a perfectly uniform mass is produced. Now add the turpentine in small portions at a time, taking care to have one portion thoroughly mixed before adding the next.

It took me about half an hour to make it.

If Mr. Conroy desires, I will send him a small quantity, and I think he will agree with me that it is a perfectly satisfactory preparation. I may add that the first quantity of lin. terebinth. I made—which was soon after the new B.P. was published—was a perfect failure. In this case I used ordinary ol. terebinth. and *sapo mollis*, B.P. It never appeared to thoroughly mix, and after being kept a few weeks most of the turpentine separated, leaving the soap in lumps, and no amount of shaking would cause them to unite again. I poured off the turpentine, and placed the masses in a mortar; and, after using plenty of elbow-grease, the turpentine being gradually added caused them to unite, forming a stiff jelly, in which the pestle would stand upright.

Yours truly,

Forest Hill, S.E., Nov. 23.

S. W. HEATON.

SIR,—*Linimentum Terebinthinæ*, B.P. 1885, has given me trouble, and perhaps your readers would like to know my experience. Made with *sapo mollis*, B.P., and in a warm mortar, commercial turpentine failed to make a mixture—only a conglomerate mass of sediment covered by a clear fluid of about $\frac{1}{10}$ its bulk.

Having three samples of ol. terebinthinæ, B.P., I tried all, and each produced a different result, under the same conditions and with the same soap. One of these was quite limpid and a beautiful liniment, in appearance like lin. terebinth. acet., B.P. The others were much like the impure article mentioned above, differing only in degree of admixture, but neither of them gelatinous.

The pure turpentine was from Howards & Sons and Barron, Harveys & Co., the *sapo mollis*, B.P., from the latter firm, so of course were thoroughly reliable.

Can you refer me to a description of the liniment by Dr. Attfield, or such high authority, as, if any exist, I have overlooked it?

Your readers will do well to examine liq. epispaeticus, B.P. Mine has failed, and the wholesale people write to inform me they cannot produce a blistering fluid by B.P. process.

Yours faithfully,

Belfast, Nov. 22.

JAMES J. GOSKAR.

[A note on this subject will be found on p. 714.]

Curious Potassium Chlorate.

SIR,—I recently ordered potass. chlor. from my wholesale house, and, on receipt of the substance sent, I triturated a small portion thereof in the mortar with sulph. sublim. To

my surprise not the slightest effect was produced. I sent a sample of the substance back to the wholesale house, and it was then submitted to chemical analysis. The chemist reports that he finds the substance to be "potass. chlor. of a very pure quality." What, then, becomes of the test in Squire's "Companion"—"Explodes when rubbed in a mortar with sulphur"? I am quite in the dark. Will you or a correspondent kindly say, "Fiat lux."

November 2.

W. R. J. (3/245.)

[Please send us a sample of this "chlorate."]

Wanted, Hard Water.

SIR,—Could you, or any of your numerous readers, kindly favour us with a good reliable formula for "hardening rain-water." Here, on this mud flat, we have no springs, except such as are brackish, and are entirely dependent on rain-water for drinking and cooking purposes. We manufacture aerated waters, and find we cannot produce that crisp and sparkling taste and appearance so peculiar to drinks made from hard spring-water. We imagine, if we could harden our rain-water, we could produce a better result, and will be obliged if any of your readers could give us a hint how to do this.

Yours faithfully,

West Indies, Oct. 29.

SUBSCRIBERS.

[This rather unusual demand may be satisfied by adding from 4 to 8 oz. of lime-water to each gallon of rain-water. The carbonic acid gas will convert the lime into chalk, which will, of course, dissolve in the excess of the gas. The lime used should *not* be washed.]

Keeping Labels.

SIR,—Mr. R. M. Roberts's method of keeping labels can be improved upon by putting a piece of wood (part of eau de Cologne boxes) the same size as the label at the bottom of each packet. It prevents the labels from curling by heat or otherwise. I have found it answer most effectually. I introduced it about nine years ago and have not seen it mentioned before or since.

Woking, November 20.

F. Cox.

The Proposed Curriculum.

SIR,—Than at the present moment at no time has there been more need that all sober men should consider well the position of the trade, and the policy advocated in some quarters for bringing about an improvement therein. Things are bad, things may be worse, things may be made worse by regulation. We are at one moment told we exist in too great numbers, and ought to be diminished. At another the hypocritical regret is expressed "see how many unfortunate candidates are a failure at their examinations; in Heaven's name give them a curriculum that they may get through their ordeal the better," and so we may have more members and more competition. How are we to understand an editor who blows hot and cold in this manner? Something near a true motive may be found in the *Pharmaceutical Journal*, page 361, in the childish whine beginning "There is one thing can save it," &c., and 392 of the same publication, "on all sides we hear of the discouragements," &c. Should the law be altered to suit educational agencies, or educational agencies adapt themselves to law? The project of curriculum itself is chiefly to be condemned when we regard it as a means to an end, and that such an end as your readers may find adumbrated in *Pharmaceutical Journal*, p. 368, "To such an extent has this state of things," &c., and page 392, "It may involve the disruption," &c. This is cool. Here you have the *vult perdere prius dementat* in lively operation. The enthusiastic editor would seem to wish to make a Pride's Purge of our business. Ah, if the power were equal to the will! Your subscribers, I hope, will read, mark, learn, and inwardly digest the passages cited above, observing well the insolent folly of those articles, their intolerance, and whitherward such policy may tend; what sort of tyranny we may be preparing for ourselves; and, indeed, whether it may not be advisable to refrain from strengthening the hands of the Pharmaceutical Council in an attempt to force the Privy Council

or cajole the Parliament; and not only so, but to meet "the new crusade," as you call it, with earnest and decisive condemnation.

A VERY OLD CHEMIST AND DRUGGIST.

The Effect of Light on Vegetation.

SIR,—We have heard of the effect of electric lighting on plants, but perhaps it may be new to some of your readers that the humbler gas light has some effect too. In this town there are trees planted on the side walks, in some cases close to the street lamps. I have noticed for the last four autumns, when taking my "ghastly constitutional," as a recent correspondent calls it, that those trees which are nearest the lamps retain their leaves on that side when the other part of the tree is bare. I do not mean that all the leaves are retained, but they do not fall off so fast, and the more powerful the light the thicker the leaves are. I have not marked so great a difference this year, because we had a heavy gale a short time since, which blew a salt spray all over the town and greatly damaged all vegetation; still, it is noticeable even now. I should be glad if any readers who are in a position to observe will kindly notice any trees so situated and report. Leamington ought to be a good town from what I remember of it.

I am, sir, yours truly,

Landport.

FREDERICK GALL.

Transparent Soap.—Referring to the query 72/252, "What are Pears' 1s. tablets perfumed with?" *Soap Boiler* tells us that a similar soap may be made by drying John Knight's best primrose soap until one-third of its weight is lost, shaving it up very thinly and dissolving it in a sufficient quantity of methylated spirit to effect solution. The methylated spirit is, previously to being added to the yellow soap, percolated through yellow sandal wood sawdust, which hides the methyl odour. When solution is effected a saturated syrup of cane sugar is added hot, to the extent of one-third the bulk of the soap solution, and well mixed. The whole is then perfumed with oil of geranium and oil of cassia and poured into frames; when set it is cut up into bars, and these bars into squares about the size of the tablets; these are then stamped out into shapes and set aside to mature, which occupies about nine months before they are fit to be sent out for sale.

Pharmaeopœia CorreCTIONS.

SIR,—No one appears to have noted an error in page 202 in the formula for making hydrarg. ammoniatum. Omit 3 pints in line 10, and substitute a *sufficiency*; and omit the second *the* in lines 11 and 13.

Yours truly,

HEDER. (257/62.)

Butyl-Chloral Hydrate.

SIR,—In the B.P. test for this substance the following passage occurs:—"It does not yield chloroform when heated with solutions of potash or soda, or with milk of lime." This definition seems rather vague, and of four samples examined by us, all gave a strong smell of (or similar to) chloroform; we wish to know whether this is to be taken as indicating contamination with chloral hydrate, or might it be caused by the formation of allylene dichloride?

A. L. DORAN.

[A comparison of the behaviour of chloral hydrate and butyl-chloral hydrate towards either of the alkalies named will reveal the difference, and the point which the *Pharmaeopœia* indicates. Allylene dichloride is one of the products of decomposition of the butyl chloral, but the odour of this body resembles that of other halogen compounds of allylene, viz. pungent and terebinthinous. We should be glad to have a sample of the articles examined by Mr. Doran.]

The Position of Cod-liver Oil.

SIR,—With reference to the article which appeared in last Saturday's edition of *THE CHEMIST AND DRUGGIST* on "The Position of Cod-liver Oil," we find the same to contain

several entirely misleading points, and therefore beg you to allow us to state a few facts relating to the same.

In the first place, the failure of the Arendals Privatbank, Arendal—not a Bergen firm—would have no influence on the manufacturers and holders of cod-liver oil in Bergen and the northern towns in Norway, as the bank was trading nearly solely amongst the shipowners, timber exporters, and manufacturers in the southern and eastern part of the country, where no cod-liver oil is produced. And further, so far from that the described consignment of cod-liver oil, &c., from Bergen should indicate a further depreciation in the prices of steam-refined cod-liver oil—the same have within the last month been advancing upwards of 15s. per cask, as well in Bergen as on the other principal markets.

This so far as the alleged rumour is concerned.

Now, as regards the season for the Norwegian codfishing: the same does not, as stated by your reporter, commence in December and end in March. The codfishing season in Norway is generally divided into two parts—what is called the “Lofoden Fishing” taking place in the districts of Lofoden, Romsdal, Söndmøre, and Nördmøre; and the “Finmarken Fishing,” in the most northern parts of the country.

The first fishing begins in Lofoden sometimes as early as the end of January, but generally cannot be regarded as earnestly commenced before the middle of February, and is at an end about Easter time, when the fishing-fleet proceeds to Finmarken, where the fishing begins about the middle of April, and ends in the early part of June. Consequently new season's Lofoden cod-liver oil cannot reasonably arrive in this market before the end of February, while any large quantity cannot be expected before the end of March; and of Finmarken cod-liver oil no important supply can arrive here before the course of May.

The fact that the codfish is in its finest condition when the fishing commences in Lofoden in February, and gradually loses in fatness as the season advances and the fish proceed along the coast, together with the facilities which Lofoden offers in the way of enabling the fishermen to bring the fish to the shore only a few hours after its being caught, so that the oil can be prepared from entirely fresh liver, accounts for the better appearance and rich quality of the Lofoden oil.

The figures given representing the production of steam-refined cod-liver oil are incorrect to an astonishing degree, coming nearer to Norway's total productions of all kinds of fish oils than to that of cod-liver oil. The exact production, according to the official reports, was in the last three years as follows:—

	1884 Barrels	1885 Barrels	1886 Barrels
Lofoden, including Romsdals			
Sönd and Nördmøre ..	6,850	8,610	17,500
Finmarken	7,200	6,200	1,850
Total	14,050	14,810	19,350
Equalling	tons 1,405	1,431	1,935

of steam-refined cod-liver oil.

It will be observed that the production of cod-liver oil in Lofoden last season was very considerable, while that in Finmarken was but of very small dimensions. This had its reason, not only in the fact that the fishing in Finmarken was comparatively small this year, but also because manufacturers, cautioned by the large production in Lofoden, which at once brought the prices down to such a point that the oil could not be made at the price, instead of producing steam-refined cod-liver oil at a high expense, simply manufactured what is sold as cod oil, and especially used by tanners and never for medical purposes.

The supposition that cod oil is pressed from the head and the body of the fish is an entirely wrong one. Genuine cod oil is produced from the liver of the cod fish and nothing else, by a more simple and less expensive process than that employed in the manufacture of steam-refined cod-liver oil. At the low prices prevailing last season steam-refined cod-liver oil was employed for many purposes for which it never had been used before, and this, together with the fact that America acted as an exceptionally large buyer, considerably reduced stocks, which at the present moment are by no means large, and hence it stands to reason that prices will further advance before new season's oil comes in; and as far as the prices of the coming season are concerned, it is beyond doubt that, unless the fishing shows an extraordinary good

result, the value of the article will be considerably beyond last season's, this more especially so because on account of the extremely low prices of Norwegian cod-liver oil only a very limited quantity of steam-refined cod-liver oil was produced at the Newfoundland fishing this season.

We are, sir, yours most respectfully,
Crutched Friars, E.C., JOHNSEN & JÖRGENSEN.
November 23.

Analysts and Analysis.

SIR,—The report of the Bedford Town Council Food and Drugs Committee exposes a danger we are placed in, and appeals on selfish grounds alone to the claim the Chemists and Druggists' Trade Association has upon us for pecuniary assistance. If it is possible for a sample to be pronounced genuine that is not so, then it follows that it is almost more possible to pronounce a sample adulterated that is genuine. But few of us, alas! have it in our power to defend ourselves single-handed against a false charge, for even success is an expensive luxury—and I doubt not many cases of conviction, if fought out properly, would have resulted in successful clearance from the charge. Union is strength, and many can help one when one cannot help many. The Association therefore deserves support on a more liberal scale than it has yet received. We need not look for any help from “the Society”; even one of its members condescends to reap credit where it is not due, and to cast reflection on men who are every whit as good and conscientious tradesmen as himself.

I wrote a letter to one of the provincial papers that published an article on the Chelsea report, to show that by omitting to give Messrs. Seaton and Hehner's report *verbatim* a false impression was given to the public as to errors by chemists and druggists; but I would have scorned to do what you say Mr. Smith of Torquay has done. The report did not distinguish between chemist and druggist and pharmaceutical chemist, and it is much to be regretted that this spirit of separation and assumed superiority should be manifested. While this is so, need we wonder so little sympathy is expressed for “the Society”? I hope my brethren who are only registered chemists and druggists will at least show that, if they are not enrolled among the “upper ten,” they have a sense of moral right that tells them such a way of explaining an unfair summary may show smartness, but certainly is open to be called unfair also.

CORRIGENDA. (25/251.)

The Exchange Column.

Just a line to speak of the advantages of your Exchange Column. I advertised last week to sell and to buy. I could have sold the three things four times over, and one post brought me three offers of what I wanted. Make what use you like of this.

Yours faithfully,
Lower Tottenham, November 12. J. E. EASTMAN.

Jury Service.

SIR,—As a warning to other pharmaceutical chemists, I wish to show how particular they should be to see that their names are not on the Juries' List issued every September, if they really wish to be free from service. One of the great reasons many pass the Major examination and become pharmaceutical chemists is undoubtedly because they thus hope to escape jury work. A few weeks ago I was startled to receive a summons from the High Sheriff of Yorkshire, requiring my attendance at the ensuing winter assizes at York Castle—which, I may add, means about a week's, more or less, entire absence from business. I at once put myself in communication with the proper officer, showing how I ought to be exempted from attendance at the court, as I am a registered pharmaceutical chemist in actual practice, and also showing how very inconvenient it would be to me, as I had no assistant to leave in charge of my shop, only a young apprentice—but all to no avail. If this only acts as a warning to other chemists whose names ought not to be on the Juries' List I shall be well pleased, and feel I have not written in vain.

York.

HENRY J. PRATT.

Hop Bitters Prosecution.

SIR,—As I have so many inquiries as to the particulars of the case brought against Mr. Platt, Matlock, and myself by the Hop Bitters Company in June last, perhaps you will allow me a little space to put the particulars and result in their proper light before the trade. We both received writs to appear before the High Court of Justice, without any previous notice whatever, in ten days from receipt of writ, to show why we had infringed the copyright of the Hop Bitters Company. Having been a member of the Trade Association at Birmingham from its birth, I naturally turned there for some help and advice. But the application was refused on the ground that the Association had no funds at their disposal to defend actions of this kind. This was very painful, as we now felt we should have to fight at our own expense a powerful, wealthy company. The matter was then left in the hands of Messrs. Glaisyer and Porter, the Association solicitors, to make the best of. They recommended that as we had ignorantly used labels which had a device somewhat similar to the Company's (viz., a picture of hop flowers and leaves), we should leave the matter in the hands of the Court and make no defence, as we should get off more cheaply than by engaging counsel to defend us. This is how the plaintiffs obtained judgment against us and a perpetual injunction so easily, we to pay all costs, which together were over 100/. The printers were the most to blame in both cases, for the labels were obtained from well-known houses, who had supplied the same to hundreds of different customers in various parts of the kingdom, and we were told were quite safe and not infringing the rights of anyone. Chemists must therefore be very careful in choosing labels which have no floral device, such as hop flowers or leaves, in the future. If they have labels of such a character, our advice is to destroy the whole at once. Since this prosecution my sales have considerably increased, especially for Hop Tonic packets, each packet containing sufficient roots and barks to make one pint. I may add that personally I have never sold a bottle or packet to anyone and informed the customer that the same were American Hop Bitters. Such practice I consider wrong; but there is a demand amongst the working-classes especially for a cheaper tonic bitter than we can supply from the American Company at 3s. 6d. I have no animosity against the Hop Bitters Company, but I found that scores of my customers would not pay so much for a bottle of medicine, and whenever I could I always supplied the original article. Now that my brother-chemists know where the danger lies, they will know how to act so as not to allow themselves to fall into a similar error as we have done. It would be well, I may add, always to have a written agreement from the printer when these labels are ordered, so that in future prosecutions they shall pay all expenses if the trial goes against the chemist so using them, as otherwise chemists may be almost ruined, the costs being so great in the Higher Courts, and no help is to be expected from the Association at Birmingham because of their having no funds to defend copyright prosecutions. Let me here thank the many kind friends who have written letters of sympathy under these painful circumstances.

York.

HENRY J. PRATT.

Prescribing Chemists.

SIR,—In the *British Medical Journal* of October 23 it is stated that the Apothecaries' Company is the only corporation in this country which possesses any power of protecting the public from the danger arising from prescribing chemists and druggists, a most numerous and by far the most dangerous prescribing quacks—who, in poor neighbourhoods, with gimlet eye, assume to penetrate the physical coverings of the patients who apply to them across the counter.

All this is very easily explained. The chemist of to-day in small towns or poor neighbourhoods would be unable to live if it were not for the few shillings earned by prescribing. Why? Because doctors dispense their own prescriptions, and in most cases retail drugs and even patent medicines: so if chemists are to have their prescribing taken from them, they should in return be protected from medical men keeping open shops or surgeries to compound and sell medicines. The grievance will never end until this is attained. One never hears of these troubles on the Continent,

because a medical practitioner, even though he be also a pharmacien, is unable to keep open shop or even dispense medicines of his own prescribing, nor can a pharmacien choosing that profession, even though he be a qualified doctor visit or write a prescription. It must be clear that, should a doctor poison a patient by accident, or through the careless dispensing of his wife or page-boy, he has a licence to give a death certificate; but in the case of a chemist it is quite different. If medical men mean to protect the public from the dangerous and gimlet-eyed quack, the public must demand also to be protected from the danger of being poisoned or taking drugs of bad quality from their medical man or his inefficient employés.

Paris.

H. GLANVILLE

57/250. *M. P. D.*—We do not recollect the article.

70/255. *Admirer.*—**Gripe Water.**—See article on "Gripes," in *THE CHEMIST AND DRUGGIST*, March 20, 1886. **Golden Hair Dye.**—A 10-per-cent. solution of peroxide of hydrogen, as supplied by the wholesale druggists, is what is usually sold. **Eye Ointment.**—Two grains of yellow oxide of mercury to the oz. of vaseline.

74/249. *E. C.*—**Glycerinum Pepsin.**—If you have not fresh pigs' stomachs available, you will find the following formula satisfactory:—

Pepsin porci	3vj.
Dilute hydrochloric acid	3iv.
Water	3v.
Glycerine, to	3v.

Macerate the pepsin in the water and acid for a day; then add the glycerine, and macerate for a week; then filter. (For methods of quick filtration, see our *DIARY* for 1887.)

48/248. *H. A. C.* (Bombay) asks "suggestions regarding materials for giving a good copying power to the ordinary blue-black or violet ink, so that the ink should dry immediately on writing, and should give at least two copies after at least two days, or (if possible) after two months."

[Sugar, gum arabic, and dextrin (British gum) are used. A mixture of the former and latter should suit.]

52/251. *Fred Akhurst* (Port Chalmers, N.Z.).—**Gurjun Balsam** is an oleo-resinous exudation from various species of dipterocarpus, which grow in countries and islands adjoining Hindostan, such as Moulmein, the Andaman and Nicobar Islands, &c. It is also known as *wood oil*, is used by the natives as a varnish, was proposed as a substitute for copal, and has been used as an adulterant for the same. This correspondent wishes formula for No. 21 Pills, which "some new chums" have asked for. Can anyone favour him?

Omega.—**Lavender Water.**—Piesse's formula is ol. lavand. Ang., 4 oz.; pure spirit, 3 pints; aq. rosæ, 1 pint. Cooley says the following has received the commendation of Her Majesty and many of the nobility:—Mitcham oil of lavender, 3 oz.; ess. musk, 4 oz.; ess. ambergris and bergamot, of each 1½ oz.; S.V.R., 2 gallons. Another formula is the following:—Ess. bergamot, 4 fluid drachms; ess. lemon and balsam Peru, of each 2 fluid drachms; oils of lavender and cloves, of each 1 fluid drachm; S.V.R., 10 oz. You can reduce the cost of these by using cheaper oils, but you will, of course, reduce the fineness of your product in proportion.

J. H. H.—**Lavender Water.**—See above.—**Eau de Cologne.**—The following formula was published in one of our past *DIARIES*, was adopted by an Australian subscriber, and won for him a gold medal at the Sydney Exhibition:—

	Parts
Bergamot	7
Citron oil	17
Ol. neroli petale	10
Ol. neroli bigarade	3½
Ol. rosemary	7
Grape spirit	3,000

Some makers consider that a trace of oil of amber, others a little oil of patchouli, aids in promoting the true Cologne odour. The formula of the French Codex is simpler. It is—

	Parts
Oil of bergamot	10
Oil of Portugal	10
Oil of lemon	2
Oil of neroli	2
Oil of rosemary	2
Alcohol, 90°	1,000

"Castor-oil Pills."—*Mr. W. Price* (Hull) writes:—"The label affixed meets the difficulty, and, to my mind, conveys the real meaning of the title. I have used the label for five or six years to my satisfaction and that of my customers. 'Aperient pills; mild as castor-oil. W. Price, chemist, 11 Witham, Hull.'"

18/267. *Peter Plymley* would be glad to know if it be possible to destroy moles in their runs by poison; and if so, the *modus operandi* and the most suitable poison. He has been informed that it is both possible and easy.

41/257. *Homœopathic Business*.—*Sussex* would like to hear the experience of other pharmacists as to whether homœopathic trade pays, and he inquires to what extent a chemist may go without injuring his reputation among his other customers and with the doctors.

60/253. *Chemist* asks why two different-sized crystals should be deposited from two samples of borax, each dissolved in the same quantity of hot water? [It is impossible to have the conditions exactly alike twice. A little foreign matter in either solution, an extra motion, or a different degree of heat at which the solution was made may suffice to cause variation in the size, though not in the shape, of the crystals.]

71/253. *T. P.*—The blotting-paper used in the DIARIES is of very good quality, but it will not stand continual use as a blotting-pad all the year round. It suffices perfectly for blotting the entries in the DIARY. We have tried to supply information in the new DIARY which will enable chemists to select the chief specialists among the London doctors.

G. C. (Malta).—*Orange Wine*.—Take 2 lbs. of sugar (or, preferably, honey) and 1 lb. of Malaga raisins to each gallon of water. Set it to ferment in a moderately warm place in an open jar, floating on the liquid a piece of toast on which some yeast is laid. During the fermentation add $\frac{3}{4}$ oz. of cream of tartar; and when it is subsiding add the juice and the peel (cut thin) of a large orange. Bottle a little before the fermentation is complete.

40/239. *B. E. H.*—*Koumiss*.—Lengthy details of the manufacture were published in THE CHEMISTS' AND DRUGGISTS' DIARY, 1884. For an artificial preparation we recommend you the following:—Mix 2 drachms of simple syrup, 2 drachms of milk sugar, and 2 teaspoonfuls of brewers' yeast with 40 oz. of skimmed milk; expose to the air for six hours, and then bottle in small champagne bottles, tying the corks down, and keeping in a cool place. This will be at its best in about six days, after which it will begin to deteriorate.

Polish for Walking Sticks.—2 lbs. shellac, $\frac{1}{2}$ lb. sandarach, and 1 gallon of methylated spirits. Dissolve, and add $\frac{3}{4}$ lb. Venice turpentine previously warmed.

73/253. *G. R. C.*—*Bay Rhum*.—Oil of bay, 6 drachms; oil pimento, 1 drachm; acetic ether, 1 oz.; white Castile soap, 4 drachms; alcohol, 12 pints; water 10 pints. Filter after a week.

55/253. *A. D.*—*Sauce* similar to some of the popular relishes may be made as follows:—Boil 24 lbs. of hog's liver for twelve hours with 10 gallons of water, frequently renew-

ing the water. Chop up the liver, work with the water, strain, and mix with the following:—

White vinegar	15 gallons
Walnut ketchup	10 "
Mushroom ketchup	10 "
Madeira wine	5 "
Table salt	25 lbs.
Canton soy	4 "
Allspice, powdered	1 "
Coriander, powdered	1 "
Mace	$\frac{1}{2}$ "
Cinnamon	$\frac{1}{2}$ "
Asafoetida (dissolved in brandy)	$\frac{1}{4}$ "

Galangal (74/248) and *N. Y. Z.* (53/17).—*Toothache Powders*.—For general use powders containing 10 grains of ammonium chloride and 2 grains of quinine sulphate are safe and effectual. An article on Dental Pathology will be published soon.

59/249. *Assistant*.—*Chances in America*.—We never heard of an American druggist so anxious for an English assistant as to pay his passage out. There are quite as many assistants there as there are vacancies, and an English assistant going out to the United States would probably be less preferred than a native one, as he would naturally be unfamiliar with the class of trade.

F. S. R. (29/249), who asked a similar question recently, writes as follows:—"Many thanks for your answer. A medical gentleman writing me from Boston (U.S.) commented upon the better chance of success in the chemical and pharmaceutical world there than in England, and one remark struck me as being peculiar. He said that to be an assistant in a drug store it was not necessary to have any special training (such as we have at Bloomsbury Square), or diploma, beyond a good knowledge of chemistry; so that a man trained for an analyst, and, say, employed in England by a drug house, would experience no difficulty—as regards qualification—in obtaining a temporary position as an assistant in an American drug store. Is this a fact? Can you tell me whether the large manufacturing druggists also employ analysts there?"

[Yes; a good many of the large drug firms employ scientific chemists, but such situations are not many, all told, and none will be vacated just to oblige a gentleman from England. It can hardly be necessary to answer the Boston gentleman's remark as to the indifference to special training, though it is true that the English diploma would have no legal value.]

251/63. *American Musk*.—*Mr. R. S. Cristiani* (Philadelphia, U.S.) writes:—"Allow me to make some further observations on this subject, upon which I notice a paper by Mr. Charles Symes in a recent issue of your Journal. The American musk is, no doubt, the most valuable substitute yet discovered for the costly Tonquin musk in many of the uses to which the latter is put. It is not, of course, equal to Tonquin musk, as there is nothing in the world now known that approaches the latter in value as an ingredient in the manufacture of perfumery; but still, for perfuming toilet soaps the American musk, in combination with other suitable substances, will be found the best possible substitute for the Chinese article. It may also be used for many other purposes, although it will not give the true odour of fine musk; but with a little age the soaps in which it has been used become similar to those scented with the true musk.

"The demand for American musk in this country and in England has steadily increased from season to season, and I estimate that some of our large soap manufacturers save large sums by its use, as they have soaps of special perfume and name, that owe their popularity to the American musk. But before the substance can become an article of commerce some system will have to be introduced in its mode of collection and of preservation, for at present, upon the approach of warm weather it is attacked by insects, and soon made worthless."

54/251. *Alpha*.—You will find paraffin scale (unpurified)

as cheap as anything for mixing with the oil-cask drippings in order to render them fit for lubricating purposes.

7/251. *Pax aut Bellum*.—We have given various formulæ for Lime Juice and Glycerine, but the following, which affords a nice inseparable compound, has not previously been published:—

	Oz.
Nut oil	16
Lime-water.. .. .	12½
Water	3½
Powdered soap	½
Lemon and bergamot, q.s. to perfume.	

Dissolve the soap in the water by the aid of heat, mix the oil with the lime-water, add the soap solution, shake well, and add the perfumes.

Full particulars regarding the syrups are in DIARY for 1887.

70/249. *Micawber*.—The only feasible plan to remove the printed matter from the post-cards is to rub them with sand-paper.

16/249. *Inscitia*.—The only way to acquire a knowledge of chemical formulæ and notation is to learn chemistry. Do not try a near cut: it is waste of time. Read Shenstone's "Introduction to Chemistry" (Rivingtons, 2s.), or Roscoe's "Elementary Lessons" (Macmillan, 4s. 6d.).

25/249. *Blackburn*.—Liquor Ferri Iodidi.—Digest 1 oz. of iron wire and 2 oz. of iodine in 5 oz. of water contained in a flask for a day: then transfer to an evaporating-dish and heat until acid vapours cease to be given off, replace water if necessary during the boiling, and when the solution measures about 4 oz. filter, add 20 minims of hypophosphorous acid, and make up to 4 oz. with water. One part of this added to seven parts of water makes the syrup.

15/245. *Gomma*.—We presume that **Blasting Ointment** used for the "rose" (erysipelas) is basilicon ointment.

26/245. *Ignoramus* (who does not use any other name) wishes to know how stoppers may be removed from liquor-potasse bottles. They cannot be, because the stopper and the neck of the bottle have practically become one mass, owing to chemical action.

5/245. *Mel* asks how Honey may be kept from crystallising, and then quaintly adds:—"I have been told by a chemist that honey may be prevented from setting without adulterating it, so keeping it in the much-fancied fluid form. Can you inform me how it is done? I understand there is one 'take of honey' which never sets; but I refer to honey taken any time during the season. I do not want to make it from glucose, burnt sugar, and a bee."

[We do not know any natural honey which does not set sooner or later, although that taken at the end of the season remains longer liquid than the first taken. To prevent crystallisation of the grape-sugar it would be necessary to convert it into levulose, by heating with a small percentage of sulphuric acid.]

29/251. *W. E. Parkes*.—We published various formulæ for Whitworth's Drops in July. One of them gives the composition as: Rectified spirit, 2 oz.; comp. tincture of lavender, 1 oz.; oil of origanum, 2 drachms.

65/248. *Xenophon*.—The colour of bees-wax may be restored by digesting it in a water-bath with a little hay saffron; palm oil might also be used, but that would, of course, partake of adulteration.

51/248. *Inchiostri* (Malta).—You will find the formula given on page 565 excellent. The ink keeps well and may be

diluted to half strength. Stephens's is said to be coloured with prussian blue, but this is doubtful.

Beta (72/253), *Deva* (65/254), and *A. J. Fanley* (44/253).—**Glycerine and Cucumber**.—The following is the formula given in last vol., p. 29:—

White glycerine soap	3ss
Cucumber ointment	3j.
Distilled water	3xxxij.
Joekey Club	3ss.

Shave the soap into fine shreds, and dissolve it in 2 oz. of water by the heat of a water-bath. Transfer to a mortar, and incorporate the ointment, previously liquefied, with it. Gradually add the rest of the water (hct), stirring constantly and dexterously; add the perfume before it cools.

See also comments on pages 534 and 596 in current volume.

For **Milk of Roses** substitute cold cream for the cucumber ointment in above formula, and 3ss. otto of rose, and 3j. of rectified spirit instead of the Joekey Club.

253/72. *Chesterfield* asks our opinion as to the best way of mixing the following so that it will not separate:—

Sapon. alb.	1 oz.
Unguent. cucumeris	8 "
Ol. amygd. ess.	8 gutt.
Otto rose	8 "
Aque rose	Oliv.

[The formula contains too little soap to form an inseparable preparation without the addition of an alkali, such as borax. At least 2 oz. of powdered soap should be used, and dissolved in 8 oz. of water with the aid of heat. With this the melted ointment should be thoroughly incorporated. When this is done, add 20 oz. of hot water, gradually and with constant stirring; then the perfume and triple rose water to make the required volume.]

Mother's Friend.—*A. J. T.* sends the following formula for this preparation:—

Sacch. alb.	1 lb.
Aque	15 oz.
Dissolve, and when cool add—	
Magn. carb. levis.	1 oz.
Pulv. rad. rhei	3ss.
" " ipecac.	3j.
" " zingib.	3iss.
Ol. anisi	℥xv.
Ol. anethi	℥v.
Tinct. opii	½ oz.
Aque, to measure	30 "

This contains tinct. opii ℥j. in 3j.

Dose: ℥v. to 3j. or 3ij., according to age.

LEGAL QUERIES.

60/253. *S. F. R.*—A grocer can legally sell liquor. ammon. fort.

69/256. *W. A.*—One of the documents you send us professes to issue from the University of Ohio at Cincinnati, and to confer the degree of M.D. on the person named. This is dated January 1, 1880. The other diploma confers the fellowship of the Society of Rational Medicine of the Michigan Republic (!) at Detroit on your friend J. M., and is humorously dated April 1, 1886. Neither of these diplomas is of legal value in this country; it would be, in fact, distinctly illegal to make any use of them.

5/257. *Arbeitsam*.—The Excise allow beverages containing 2 per cent. of proof spirit to pass duty free. It has also been given out that proceedings are not taken when the quantity of proof spirit in fermented liquors is under 3 per cent.

DISPENSING NOTES.

[The opinion of practical readers is invited on subjects discussed under this heading.]

Collodion and Chlorate of Potassium.

SIR,—Will anyone kindly explain how the following should be dispensed, and also what is the presumed action of the chlorate of potash.

Potass. chlor.	..	..	..	..	3j.
Ext. bellad.	..	..	..	..	3ss.
Collodion	..	..	..	..	3ss.

M.

Yours faithfully,
W. F. W. (71/15.)

The Illegible Prescription.

SIR,—“F. G.’s” pocket-glass has been too small, for he has failed to see the whole of the prescription, having omitted to translate the seventh line altogether, which, he will notice, runs down the left-hand side of the prescription. This line will explain to “F. G.” what he says is at present a mystery to him—viz., how I get “every 8 hours.” The directions are in each case in English; “F. G.” and “Juniper” both try to make Latin of them, and fail. “F. G.’s” translation of the fourth line cannot be correct, as he reads “8 bottles to be taken occasionally”; whereas it really is written in English, “One every 8 hours.”

The two signs like the figure “7” which “F. G.” construes “Sumat” and “Sig.” respectively, really are abbreviations for “every.” I think my reading will be admitted the correct one.

Yours, &c.,
Manchester. T. C. E. O. (256/61.)

SIR,—I would have dispensed it as follows:—

Quinine disulph.	..	..	..	..	3ss.
Sodii bromidi	..	..	..	..	3ij.

M., et div. in pulv. viij. Sig.: One every 8 hours.

Detur liq. ferri chloroxidi 3j.

Sig.: Twenty drops in water every 8 hours.

SPEM. (75/35.)

10/257. *E. Clarke*.—The German Prescription which you send us reads as follows:—

Rp.
Ol. cadin 25,0

V. A.

S. Äusserlich!

Rp.
Pulv. sem. oryzae 25,0

S. Äusserlich!

“V. A.” is the contraction for “*vialo aporto*”—a stoppered bottle.

“Äusserlich” means “externally”; or, “for external use.”

An Unofficial Remedy.

SIR,—I had the following presented the other day to make up. Can any of your readers make out what is intended?

Decoct. rad. ramieis crisp.	..	..	..	3ij.
Tr. Geoffroye inerm.	..	..	..	3ij.
Extract Gavalles	..	..	..	3j.
Acid citric	..	..	..	3iss.
Sp. vini rect. 56 o.p.	..	..	..	3ij.
M. Mist. stet dies xv. et adde—				
Aque ad	..	..	..	3xiv.

SUBSCRIBER. (38/254.)

[*Rumex crispus* and *Geoffroya* (or *Andira*) *inermis* are drugs whose chemistry and therapeutics have been investigated. Can anyone tell us something of their pharmacy; also what the extract is.]

256/53. *C. F. J.* submits the following for “some of our younger readers to try their hands upon.” The pills were dispensed by him a few days ago.

Camphore	..	..	..	..	gr. ss.
Ammon. carb.	..	..	..	..	gr. iss.
Ft. pil. Mitte xxiv.					

Paraffin Ointments.

SIR,—In reply to “Student’s” request for opinions on the unguents of the B.P. made with paraffin, hard and soft, I beg to offer my experience. I find that ung. hyd. ox. rub. made according to the formula in new B.P. presents a granular and unsightly appearance, and, further, the ointment will not adhere to a surface which is moist. The old formula did adhere to moist surfaces, and the ointment was a good and presentable one. Why they altered its formula I cannot say, and I think it would puzzle those who did alter it to say why they did so. Ung. hyd. nit. dil. is very much too soft, and more fit for a bottle than a pot.

Yours truly,
Chester. LOCUST. (37/257.)

MISCELLANEOUS QUERIES.

Yellow Colouring for Lemonade, in powder form, can be obtained from such houses as Messrs. Bush & Co., Stevenson & Howell, &c.

Sheep Dip.—In reply to “E. C. A.,” *Mr. J. Ettles* (Elgin) writes:—“In the ‘Agricultural Notebook,’ by P. McConnell, late Professor of Agriculture in Glasgow University, page 252, a formula for dip containing arsenic is given. Published 1883. Also in ‘Farm Live Stock,’ by Robert Wallace, F.C.S., F.H.A.S., Professor of Agriculture in Edinburgh, p. 146. Published 1885.”

Query 43/249 is for a varnish for cut flowers, to keep them fresh for a day or two.

46/252. *Chemicus*.—A few drops of liq. ferri dialysat. or of ext. glycyrrhiz. co. will serve to colour the iron and quinine tonic.

47/248. *Assist Nature*.—**Cough Mixture**.—We understand you to want a mixture in which syrup of wild cherry will be one of the ingredients. The following is a good one:—

Chloral hydrat.	..	..	..	100 gr.
Acet. ipecacuanhae, 1 in 20	..	..	..	3ij.
Syrup. toltan.	..	..	..	3ij.
Aque camphore	..	..	..	3ij.
Syrup. pruni virginian. ad	..	..	..	3xxx.

Dose: For children, ℥x. to 3j.; for adults, 3j. to 3iv. in water.

Dandruff.—You will find a formula for an ointment, originally given in our 1884 DIARY, repeated in the current volume. A solution of chloral hydrate—3ij. to 3viij. of rose water—has also been recommended.

S. C. asks whether Bay Rhum contains any expressed oil, and, if so, how it can be made bright to prevent separation.

[Genuine bay rum does not contain fixed oil, but sophisticated kinds have been found which contained as much as 50 per cent. of fixed oil. These should not be used for hair preparations. There should be no difficulty in getting the genuine imported article, which mixes clear with water—any slight turbidity being readily removed by shaking up with a little kaolin and filtering.]

38/253. *E. O. S.* has a brass counter-rail from which part of the lacquer has come off, so that it has rather an unsightly appearance. He wishes to know if he can lacquer it himself.

[Brass goods are first heated to 75° C. before the varnish is applied. The heating may be dispensed with, but in this case the coating is not so permanent. The varnish which is generally used is composed of 1 part of seedlac in 4 or 5 of methylated spirit, coloured with dragon’s blood or turmeric if a bright golden colour is desired.]

7/251. *Pavant Bellum*.—Is your nitric acid of full strength, and pure? If there is a proper excess of nitric acid left, the liq. ferri perritatis should not deposit.

14/253. *Apprentice*.—Cosmetic Zinc Cream.—Add 1 grain of sulpho-carbolate of zinc to each ounce of the milk of roses formula given in this issue.

Sachet Powders.—Use 8 parts of bran and 1 part of orris powder as the basis, and add an ounce of jockey club, or other perfume, to each pound of the mixture.

Which cold cream formula do you refer to?

34/251. *Ajac*.—Glycerine Jelly.—We reprint a good old formula for you:—

Gelatine or isinglass	1 oz.
Glycerine	20 "
Water	20 "
Boric acid	2 drachms

Soak the gelatine in the water until soft, then heat until dissolved; and, when it cools down a little, add the white of an egg to it. Mix well, and again heat, to coagulate the albumen; add the other ingredients, and strain while hot. Perfume with any desired odour. If the gelatine gives a clear solution the white of egg need not be used.

67/253. *Abstainer*.—Glycerine Cream.—

Glycerine	6 oz.
Soft soap	5 "
Rose water, triple	5 "
Tincture of arnica	$\frac{1}{2}$ "
Boric acid	$\frac{1}{2}$ "

Dissolve the acid in the glycerine by the aid of heat; then add the mixture to the other ingredients, which have previously been well mixed in a mortar.

65/253. *A. L. Doran*—Volumetric Work.—“On estimating HCN or SO₂ (using the pipette as measure instead of weighing), is it practically necessary to allow for expansion of the solutions; if so, where is the best table of coefficients to be found?”

[The Pharmacopœia directs measurements to be made at 60° Fahr., but a little latitude is permissible in all cases; and in those mentioned measuring is more accurate, because more rapid, than weighing. We do not think that the Pharmacopœia aims at mathematical accuracy.]

Syr. Hypophos. Comp. (Ext. Phar.).

65/253. *A. L. Doran* writes:—“Can any subscriber oblige me with his experience of this preparation, or has the formula ever been criticised? It appears to me absurd, as in the first place, out of the five ingredients to be used two only are hypophosphites, and the lime salt usually present in compound syrups is omitted altogether; secondly, either the dose or the proportions seem to be astray; and, thirdly, the product does not resemble the advertised preparations.”

[This subject is discussed in our forthcoming DIARY. It should be noted that the calcium hypophosphite is the cause of the heavy deposit in some syrups.]

66/245. *X. Y.*—The balsam appears to be a mixture of Canada balsam, resin and an oil or fat.

21/249. *Vaseline*.—The plaster which you send us resembles **Gold Beater's Skin**, and is prepared by coating one side of the skin with a weak solution of gutta percha, an adhesive coat being imparted with the following solution:—

Gum benzoin	2 oz.
Rectified spirit	12 "
Isinglass	2 "

Dissolve the benzoin in the spirit, and filter. Soak the isinglass in water (about 6 oz.), and dissolve by the aid of heat. Mix the solutions and decant the clear portion, which is to be applied hot.

67/255. *A Student*.—The rationale of the B.P. process for the **Estimation of Opium** is that the lime splits up the alkaloidal meconates and sulphates, the morphine and narcotine combine with calcium hydrate to form double hydrates.

These are subsequently split up by the ammonium chloride, and by treatment with ether the narcotine is kept in solution (being soluble in ether) while the morphine crystallises out.

Purification of Bismuth from copper and arsenium is effected according to the Pharmacopœia by fusion with sulphur and potassium cyanide. The impurities combine with the sulphur and are kept free from the bismuth by means of the cyanide.

58/253. *Country*.—Children's Hairwash.—The following is a satisfactory parasitic lotion:—

Stavesacre seed (brnised)	1 oz.
Strong acetic acid	4 oz.

Macerate for seven days, filter, and wash the marc with an ounce or two of water. Add the filtrate to the following solution:—

Camphor	2 drachms
Rectified spirit	10 oz.
Glycerine	5 oz.
Water	40 oz.

Perfume with some French essence, such as frangipani.

See also page 360.

41/253. *Cynro*.—Pick-me-up Bitters (sherry-coloured).—

Spirit of chloroform	2 oz.
Aromatic spirit of ammonia	5 "
Tincture of cascarella	5 "
Glycerine	5 "
Compound tincture of gentian, to	30 "

Dose: From 3j. to 3iv.

39/254. *J. T. H.*—Glycerine Manufacture.—You will find this subject treated fully in the book on technical chemistry, published by Mackenzie. Most public libraries have a copy of the work.

41/254. *A Country Subscriber*.—Hogg's “Manual on the Microscope” (7s. 6d.) is a very good book for general use; while those of Beale and Carpenter—which sell at about double that price—are recognised as the best books on the subject.

73/2. *Aq. Lavand.*—If the formula for hypophosphites syrup contains sulphates, the odour which has been developed is likely to be sulphuretted hydrogen. Please send us a sample with the deposit in it.

26/251. *P. C.* writes regarding **Essence of Linseed**, of which we gave a formula on September 4:—After standing for a few hours he gets a sediment at the bottom of each bottle. Thinking it might be caused by the tolu, he made another half gallon without it, but still it is there. [The deposit is very probably due to the senega, and the only way to get over it is to allow the whole to stand, and to decant the clear portion. Ammonia, always successful in clearing senega solutions, is inadmissible in this case.]

18/252. *H. E. C.*—**Taurocholate of Soda** is best made into suppositories with a gelatine basis.

Information Wanted.

[Replies to the following requests are solicited by Correspondents of THE CHEMIST AND DRUGGIST.]

53/251. Formula for kid-reviver similar to Propert's.

46/248. Recipe for granular browning.

66/252. Formulæ for concentrated ginger wine essence, and concentrated herb beer essence.

40/339. Horehound beer formula asked for.

39/253. Addresses of makers of presses and dies; the latter for soap-stamping.

45/253. Actinic green vials—1½-drachm and 3-drachm—in bronze card cases. Where obtainable.

7/251. Maker of menthol cone moulds.

DR. LINCK'S GENUINE MALT EXTRACT,

CONDENSED IN VACUO,

Prepared by M. KOCH & CO., Successors to Dr. Linck & Co., Stuttgart, Germany. (Established 1864.)

This carefully-prepared Malt Extract is well known on the Continent, and recommended by the highest medical authorities in cases of Debility and Emaciation, in Diseases of Children with Consumptive Symptoms, Chronic Cough, &c.

Sole Consignees for the United Kingdom—H. POTHS & CO., 4 Sugarloaf Court, Leadenhall Street.

Sold in Bottles—Retail Price, 2/ each; Wholesale, 19/ per dozen.

LEUBE-ROSENTHAL'S IMPROVED MEAT SOLUTION,

Prepared by R. STUETZ, Chemist, Successor to Dr. MIRUS, Jena, Germany.

This carefully-prepared Meat Solution contains the real, stimulating, and nourishing constituents of the best quality of beef, freed of fat and sinews. Owing to its high degree of digestibility, it is of the greatest value to persons suffering from stomach and nervous complaints, to delicate children, convalescents, etc. It is at the same time exceedingly appetising, and totally devoid of that objectionable nauseous taste so common in most of the Meat Preparations.

It is warmly and solely recommended by Professor Leube. See "Sammlung Clinischer Vorträge" of R. Volkmann, in Dr. Wiel's "Tisch für Magenkranke," and in Professor Reclam's "Gesundheit" (Zeitschrift für Hygiene), No. 14, vii., 1882, under the title "Newest Nourishments." Professor Reclam also has had great success with it in cases of debility of persons of all ages. This Preparation has been for some time, and is still, in use at the German Hospital, Dalston.

Sole Agents for England—H. POTHS & CO., 4 Sugarloaf Court, 50 Leadenhall Street, London, E.C.

Sold in $\frac{1}{2}$ -lb. Tins. Retail Price, 2/ each; Wholesale, 17/ per dozen.

SHOP BOTTLES & JARS

WITH VITRIFIED (burnt in) LABELS

(Black Letters on a ground of Pink or White Enamel).

Labels indestructible and of elegant appearance, forming an even surface with the glass or porcelain. The Jars of best porcelain, thoroughly greaseproof. The Bottles hand-made and of superior quality. Both are unsurpassed by anything in the market in every respect. Also a CHEAPER sort of Bottles and Jars, with labels equally indestructible, but very plain, especially suitable for Dispensaries, &c. Intending Buyers are requested to inspect Samples at

H. POTHS & CO.,

4 SUGARLOAF COURT, 50 LEADENHALL STREET, LONDON, E.C.

A large number of Shops have been fitted up with these Bottles and Jars, both in England and the Colonies, a list of which can be had on application.



ACID. ACETIC., B.P., ACID. ACETIC. 1·040. Guaranteed made from Soda
PEROXIDE of HYDROGEN, for Bleaching Feathers, Hair, Silk, Jute, Ivory, Bone, &c.
CRETA PRÆCIP. Very White, Soft, and Light.

PHOSPHORIC ACID, B.P. strength and concentrated, Pure and Free from Arsenic.
LIQ. FERRI PERCHLOR. FORT., B.P. Free from Arsenic, and Soluble in Spirit.
HYPOPHOSPHITE of LIME, SODA, &c. CYANIDE of POTASSIUM.

Ferri et Ammon. Cit., Ferri et Quiniae Cit., B.P., and other Scale Preparations.

DUNN & CO., Stirling Chemical Works, WEST HAM, LONDON.

MORRIS & CALLARD,

PONTAMMAN CHEMICAL WORKS,

AMMANFORD, R.S.O., CARMARTHENSHIRE,

MANUFACTURERS OF

ACETIC ACID, P.B., ACETIC ACID FORT, SP. GR. 1·040.

ACETATE OF SODA,

NAPHTHA, SULPHURIC ACID, AND CHARCOAL.

PRICES AND SAMPLES ON APPLICATION.

AYRTON & SAUNDERS,

Designers and Manufacturers

OF

High-Class Artistic Specialities

FOR CHEMISTS AND DRUGGISTS;

WHOLESALE AND EXPORT DEALERS IN

PATENT LINT, PLAISTERS, AND COTTON WOOL,

MEDICAL GLASS BOTTLES,

SURGICAL INSTRUMENTS, TRUSSES, &c.

HARD AND SOFT WOOD TURNERS;

MANUFACTURERS OF ROUND, SQUARE, AND OVAL BOXES,

IN PAPER, WILLOW, AND CHIP;

IMPORTERS OF

AMERICAN, GERMAN, & FRENCH BOXES;

AND GENERAL DEALERS IN

DRUGGISTS' SUNDRIES of every description.

SPECIAL QUOTATIONS TO LARGE BUYERS FOR CASH.

WAREHOUSES—

149 & 153 DUKE ST.



FACTORY—

62 PARR STREET,

LIVERPOOL.

All Letters, Orders, &c., to be addressed to the Firm, 149 DUKE STREET.



AYRTON & SAUNDERS will be glad to undertake Foreign Agencies and Commissions, and to buy and ship for Firms who have no representatives in England, and as they keep themselves thoroughly abreast of the times their friends can rely upon being well posted up in all the Novelties and Specialities that are being constantly introduced.

GOLD MEDALS,

INTERNATIONAL INVENTIONS EXHIBITION, LONDON, 1885.

INTERNATIONAL EXHIBITION, PARIS, 1885.

IMPROVED HIGH TEST BICARBONATE OF SODA, SODÆ BICARB. PULV.

Containing 99 per cent. of Bicarbonate of Soda.

CRYSTAL CARBONATE

The Best Preventative of Boiler Incrustation, and the **PUREST**
and **CHEAPEST** form of

SODA CRYSTALS.

One Ton of Crystal Carbonate contains as much Alkali as 48 cwt.
of Soda Crystals.

Price of ONE TON of

CRYSTAL CARBONATE,

F.O.R. WIDNES,

£5 1s. 6d.

Price of 48 CWT. of

SODA CRYSTAL,

F.O.R. WIDNES,

£7 4s. 0d.

GASKELL, DEACON & CO.,
WIDNES, ENGLAND.

AMERICAN MEDICINAL ROOTS, HERBS, BARKS, &c., &c. FOR EXPORT.**PEEK & VELSOR,** 9 Gold Street,
NEW YORK CITY, U.S.A.**WHOLESALE EXPORT BOTANIC DRUGGISTS.**

ALWAYS IN STOCK, PRIME GRADES OF:—

Golden Seal Root . . .	Hydrastis Canadensis
Mandrake	Podophyllum
Pink	Spigelia
Bayberry Bark . . .	Myrica
Blood Root	Sanguinaria

ESTABLISHED 1840.

Black Root	Leptandra
Elm Bark	Ulmus
Hemlock Bark	Pinus
Seneka Root	Senega
Snake Root	Serpentaria.

*Cascara Sagrada, Grindelia, Yerba Santa, Damiana, Ava Kava, and all Central American and South American Drugs, crude and prepared to order.***SPECIALITIES—RARE DRUGS.****E. FOUGERA & CO.,**No. 30 NORTH WILLIAM STREET,
NEW YORK, U.S.A.,Importers of and Agents for the Principal
FOREIGN MEDICINAL PREPARATIONS
AND SPECIALTIES.

AGENCIES AND CORRESPONDENCE SOLICITED.

EISNER & MENDELSON,

IMPORTERS AND EXPORTERS OF

**FOREIGN & DOMESTIC HERBS
ROOTS, DRUGS,
CHEMICALS & PATENT MEDICINES**Consignments and Agencies solicited. Highest references furnished.
Sole Agents for the U.S. for Johann Hoff's Malt Extract.
" " " H. Trommsdorff's Chemicals.

818 & 320 RACE STREET, PHILADELPHIA, PA.

Chemists requiring a Business
should refer to the Advertisements
in THE SPECIAL EXTRA SUPPLE-
MENT, printed on Coloured Paper,
which appears in this number.

METCALF'S COCA WINE

From Fresh Coca Leaves.

A PLEASANT TONIC AND INVIGORATOR.

Public Speakers, Singers, and Actors have found Wine of Coca (METCALF'S) to be a valuable tonic to the vocal cords, and also a sedative, allaying nervous fright without perceptible after-effect. It is agreeable to the taste, and can be prescribed for children or convalescents. Athletes, Pedestrians, Bicyclists, Tennis and Base Ball Players have found by practical experience that a steady course of Coca, taken both before dining and after any trial of strength or endurance, will impart energy to every movement, and prevent fatigue and waste from the system.

SEND FOR QUOTATIONS IN BULK.

THEODORE METCALF.] ESTAB. 1837. [FRANK A. DAVIDSON

THEODORE METCALF & CO.,
39 TREMONT STREET. BOSTON, MASS., U.S.A.NEW YORK AGENCY—
E. FOUGERA & CO., 30 North William St., New York, U.S.A. ⁽²⁾
*And the Retail Drug Trade throughout the World.***EDWARD MAYHEW,**
WHOLESALE AND RETAIL CHEMIST & DRUGGIST,
Fremantle and Perth, WESTERN AUSTRALIA,*Is prepared to accept AGENCIES for NEW SPECIALITIES, PATENT MEDICINES,
DRUGGISTS' SUNDRIES and PERFUMERY, &c.*CORRESPONDENCE SOLICITED. SAMPLES MAY BE SENT FOR ENCLOSURE TO
J. C. LANYON, Esq., 27 Gresham House, Old Broad Street, LONDON.

CRESCENT



BRAND.

BICARBONATE OF SODA,

REFINED AND RECRYSTALLIZED.

PURE AND CHEAP.

ANALYSIS.

Bicarbonate of Soda	...	...	...	...	96.81
Mono Carbonate of Soda	...	...	...	...	2.44
Sulphate of Soda	...	...	...	...	trace
Chloride of Sodium	}	...	...	...	.035
Chloride of Magnesia					
Moisture	...	...	...	...	.82
Insoluble	...	...	...	...	nil

PURE ALKALI,

GUARANTEED 58 DEGREES,

EQUAL TO 98 PER CENT. OF CARBONATE OF SODA.

Most economical form of Soda for the use of Printers,
Bleachers, Dyers; Glass, Paper, and Soap Makers.

BRUNNER, MOND & CO., LIM.,

*Manufacturers of Soda by the Ammonia Process
(Solvay's Patent),*

NORTHWICH, CHESHIRE.

GOLD MEDALS—DUBLIN, 1882; BOSTON, 1883;
LONDON (INTERNATIONAL EXHIBITION), 1884.

SIR JAMES MURRAY'S PURE FLUID MAGNESIA.

The ORIGINAL Article, as prepared by the Inventor, Sir James Murray, M.D.

For over 60 years in use as an excellent remedy in cases of

ACIDITY INDIGESTION, HEARTBURN, GRAVEL, AND GOUT.

Sold by all respectable Chemists, in **LARGE-SIZED** Bottles (the 1s. size containing nearly
Double the quantity usually sold at that price), at 1/, 2/6, and 3/6 each.

CAUTION.—Observe that the Signature of the Inventor is on every label.

SIR JAMES MURRAY'S FLUID CAMPHOR

Is a valuable remedy in cases of **SLEEPLESSNESS** and **WEAK NERVES** Bottles, 1/ and 2/ each.

SIR JAMES MURRAY & SON, Chemical Works, Temple Street, Dublin.
BARCLAY & SONS, 95 Farringdon Street, London.

HENRY AYSCOUGH THOMPSON & SON,

WHOLESALE & EXPORT DRUGGISTS,
22 WORSHIP ST., FINSBURY SQUARE, LONDON.

LIQUOR SENNAE DULC. (MOIR'S). LIQUOR RHEI DULC. (Moir's).

Sole Makers of these Preparations.

CONCENTRATED INFUSIONS, DECOCTIONS, EXPRESSED JUICES, EXTRACTS, &c.

PRICE LISTS ON APPLICATION.

The above can be had of Scott, Thomson & Co., Calcutta; Heynes & Co., Cape Town; Elliot Bros., Sydney;
E. Prosser & Co., Sydney; Kempthorne, Prosser & Co., Dunedin; Felton, Grimwade & Co., Melbourne and
Wellington; Elliott Bros., Brisbane; Berkley, Taylor & Co., Brisbane, &c., &c.

JAMES WOOLLEY, SONS & CO.,

Drug Millers, Wholesale and Export Druggists,

AND

MANUFACTURING · PHARMACEUTICAL · CHEMISTS.

~ SPECIALITIES. ~

Spirit of Nitrous Ether.

Guaranteed of Official Strength.

Aromatic Spirit of Ammonia.

Distilled from Volcanic Ammonia.

Assayed Opium, Cinchona, and Scammony,

Their Powders and Preparations.

The "Extra Pale" Cod Liver Oil.

Free from fishy odour. Unchanged at 32° F.

Dalmatian Insect Powder.

From Unopened Flowers, free from added colouring matter.

Tasteless Coated Pills.

Soluble in cold water.

Pure Crushed Linseed.

Ground from Screened Seed.

Pure Yellow Beeswax, in Bars.

M.P. 149° F.

Soluble Essences of Ginger, Lemon, &c.,

For flavouring Aërated Waters.

Emulsified Cod Liver Oil.

With Hypophosphite of Lime.

Minerolin (Mineroleum).

A pure Hydro-Carbon Ointment Basis.

Levigated Ointments

By Steam Power.

DEALERS IN DRUGGISTS' SUNDRIES.

CHEMICAL AND PHARMACEUTICAL APPARATUS AND SURGICAL INSTRUMENTS.

PROPRIETORS OF

"The SANITARY ROSE POWDER," the "BOVAL" TOILET PREPARATIONS, &c.

Drugs and Chemicals Ground for the Trade.

Warehouse and Offices: 2 & 4 Swan Court, Market St.; Laboratories and Drug Mills: Knowsley St., Cheetham,

MANCHESTER.

Prices Current and Catalogues on demand. Special quotations to large buyers. Telegrams—"PHARMACY MANCHESTER."

BURGESS, WILLOWS & FRANCIS,

Wholesale & Export Druggists

AND

MANUFACTURING PHARMACEUTICAL CHEMISTS

WHITE HORSE BUILDINGS,

101 HIGH HOLBORN, LONDON.

ESTABLISHED 1751.

DRUGS, CHEMICALS, AND PHARMACEUTICAL PREPARATIONS.

PRICE LISTS ON APPLICATION.



OIL LEMON.

PEPSINE.

TEREBENE.

TINCTURES AND
SPIRITS IN BOND.

ACID SALICYLIC.

SOLUBLE ESSENCES
FOR
CONFECTIONERY
AND
MINERAL WATER
MAKING.**BURGOYNE, BURBIDGES,
CYRIAX & FARRIES,**ESTABLISHED
OVER 140 YEARS.ESTABLISHED
OVER 140 YEARS.**WHOLESALE DRUGGISTS,
MANUFACTURING CHEMISTS,**
Importers of Drugs, Essential Oils,
and Chemicals.**PRIZE MEDALS—**

Paris, 1867; Paris, 1878; Calcutta, 1884.

PRICE LISTS, SAMPLES, &c., UPON APPLICATION.

**16 COLEMAN STREET,
LONDON, E.C.**

FLUID EXTRACTS.

ORGANIC
CHEMICALS FOR
RESEARCH.

PETROGELL.

PEPTOLEINE.

RED CROSS LINT.

MOXON'S
MAGNESIAN
APERIENT.London International and Universal Exhibition, 1884, Gold Medal Awarded for our Pharmaceutical Preparations.
Calcutta Exhibition, First-class Certificate and Two Prize Medals Awarded for our Pharmaceutical Preparations.**HEWLETT'S
MIST. PEPSINÆ CO. C. BISMUTHO.**

Highly recommended in various forms of dyspepsia, having a direct action upon the mucous membrane of the stomach and intestines as a sedative. It can be administered with marked and almost instantaneous effect in the irritative form of dyspepsia, more especially when *pyrosis* is a conspicuous symptom, and pain occurs an hour or more after food. In simple neuralgic gastric pain following eating, occurring in feeble subjects, it is especially indicated, and even in *carcinoma* it has been used with great success in alleviating pain and vomiting.

In the dyspepsia of patients dependent upon some organic disease, and where there is a decided loss of nerve power, it is of singular service. Thus, for instance, a person after a meal complains of a peculiar gnawing and emptiness, with slight pain at the epigastrium, evident signs of general relaxation and loss of nerve power, clinical experience has shown that it is of great service as a tonic and stomachic. A portion of its value arises, it may be, from its action upon the spinal motor nerve-centres. Be these things as they may, experience has abundantly demonstrated the value of the compound as a stomachic, antidyspeptic, and tonic, in general functional atony and relaxation, and in the various forms of dyspepsia, constipation, or diarrhoea, connected with atony of the visceral muscular coat, the Mist. Pepsinæ Co. c. Bismutho is a very valuable remedy. In the *exhausting purging of Phthisis*, accompanied with night sweats and restlessness, Dr. MATHEWS, of Nantwich, has used it with marked and appreciable effect.

Price (in England) 10s. 6d. per pound.

Physicians will oblige, when ordering Mist. Pepsinæ Co. c. Bismutho, by writing Mist. Pepsinæ Co. (Hewlett's).

Packed (for Dispensing only) in 10-oz., 22-oz., 40-oz., and 90-oz. Bottles.**LONDON MEDICAL RECORD REPORT.****MISTURA PEPSINÆ COMPOSITA CUM BISMUTHO.**

"This combination of Messrs. HEWLETT is one which has been extensively tested, and with good results. It is justly popular in the profession as a very valuable and effective combination. It serves not only to improve *apepsia*, but to lessen the gastric pain and to facilitate difficult and painful digestion, without setting up any evils of its own. It is a very good crutch for persons of weak stomach to lean on."—January 15th, 1881.

C. J. HEWLETT & SON,

MANUFACTURING AND PHARMACEUTICAL CHEMISTS,

40, 41 & 42 CHARLOTTE STREET, LONDON, E.C.

[Established 1832.]

DENOVAL'S MEDICINAL CAPSULES

ARE THE BEST AND CHEAPEST.

Attention is called to the following articles:—

**MEDICINAL
CAPSULES.**

	Trade Price.	Retail
Peruvian Mixture Capsules.....	10/ & 7/6	3/ & 2/
Matico Oil and Copaiba do.	11/	2/6
Santal Oil do. (30 in each box).....	23/	4/
Cubeb Oil and Copaiba do.	9/6	2/6
Copaiba, Cubeb Oil, and Santal Oil do.	15/6	3/6
Copaiba Capsules, No. 0	5/9	1/6
" " " " No. 1	5/6	1/3
" " " " No. 2	5/	1/
Copaiba, Alum and Cubeb's	5/9	1/6
Compound Ferruginous.....	5/9	1/6
Cubeb Oil.....	23/	4/
Male Fern Oil	10/6	3/
Cod Liver Oil.....	5/9	1/6
Castor Oil.....	5/6	1/3
Denoual's Injection (to insure a radical cure in two days).....	16/	2/9

ALL DRUGS WARRANTED TO BE GENUINE

JULES DENOVAL,

Carlton House, 4 New Cross Road, London, S.E.

INJECTION DAY.

An Infallible Remedy and Certain Cure

IN ALL

URINARY DISCHARGES.

BOTTLES 2/6 EACH.

Depot: **J. MUNDAY, Chemist, Cardiff.**London: **F. NEWBERY & SONS, 1 King Edward St., E.C.**Melbourne—**FELTON, GRIMWADE & CO.; ROCKE, TOMPSITT & CO.** Sydney—**ELLIOTT BROS.****ANGLO-NORWEGIAN
COD-LIVER OIL**

Samples and quotations on application. Cod-liver Oil has never been so cheap as this season.

Small samples for distribution to Medical Men and others supplied gratis.

EVANS, LESCHER & WEBB,
60 Bartholomew Close,AND AT **LONDON.**

Manchester, Birmingham, Liverpool, Montreal, Paris, Sydney, and Victoria, British Columbia.

*Their Export Lists, Spanish and English, form an excellent advertising medium for Proprietaries. Circulated to the Trade in every quarter of the Globe.***FOREIGN SPECIALITIES AND MEDICINES.****REVISED PRICE LIST.****ROBERTS & CO.,**FOREIGN AND ENGLISH CHEMISTS, WHOLESALE, IMPORT, AND EXPORT AGENTS FOR
FOREIGN MEDICINES AND PATENTS,**76 NEW BOND STREET, LONDON.**

Messrs. Roberts & Co. beg to inform the Trade that they are Agents for all the principal French and Foreign Specialities and Medicines, a large supply of which they have always on hand, and can supply on very favourable terms. They are in daily communication with their Paris House, and can offer exceptional facilities for procuring New Medicines, &c., &c., with very little delay.

The following is a list of a few that they name *as hazard*, and that have a large sale:—

Retail	Per doz.	Retail	Per doz.	Retail	Per doz.	Retail	Per doz.
4/8..Alcool de Menthe Ricques 41/5		4/6..Capsules Matico	36/	2/3..Guyot's Goudron	18/	7/0..Rabuteau's Elixir Ferrug...65/	
2/8.. Ditto ditto ..21/8		4/6.. " Raquin	36/	11/..Laville's Gout Tincture ..	91/10	2/9.. " Sirop " ..	24/4
2/8..Aubergier's Syrup	26/3	4/6.. " Mathey Caylus	27/	11/.. " " Pills	91/10	4/0..Racahout	31/
2/9.. " Pâté	15/4	4/6..Chassaing's Wine.....	38/9	2/3..Papier Fayard.....	13/6	4/6..Reynal's Bougies	37/10
6/8..Bay Rum	57/	2/9.. " Pills	24/4	1/1/2 Ditto	7/3	2/9..Ricord's Injection	24/4
5/3.. Ditto	31/	4/6..Clin's Bromide Cam.Dragées	45/	4/..Papier Fruneau	24/4	4/6.. " Capsules	36/
2/..Belloc's Charcoal	15/4	5/..Kan Botot (Genuine)	40/1	2/3.. Ditto	14/5	9/.. " Syrup..90/; 4/6; 42/	
1/9.. " Lozenges	14/5	3/.. Ditto	24/4	1/9..Pâté Anbergier	15/4	1/6..Star Paper	11/
4/8..Blancard's Pills	32/5	2/6..Espie's Cigarettes.....	13/6	1/9.. " de Berthé	15/4	2/9..Vallet's Pills	22/6
2/8.. Ditto	18/	6/..Elixir de Coca	56/9	2/9.. " de Coca	24/4	1/9.. Ditto	14/5
6/..Bron's Injection	27/	2/9..Flon's Syrup	22/6	1/9.. " de Georgé	14/5	4/6..Velontine (White,Pnk,Yel.)	37/10
1/9..Bugeaud's Wine	36/	2/..Gayetty's Paper	15/4	1/1/2 Ditto	9/	3/6.. Ditto ditto	27/
4/..Bully's Vinegar	32/5	2/3..Granules Arsen. Acid	13/6	1/6.. " de Nafé	13/6	2/9..Vichot's Trochisques.....	21/8
2/.. Ditto	15/3	2/9.. " " Iron	14/5	1/9.. " Regnaud	14/5	4/6..Valentine's Meat Juices....	38/
4/6..Candé's (Lait Antéphilq.)	39/8	2/9.. " " Soda	14/4	7/..Pierlot's Valerian	59/5	4/6..Vin de Coca Mariani	39/8
4/6..Capsules Bromide Camph. 45/		2/9..Grimault's Syrup Lime	23/5	2/9..Rabuteau's Drgées Ferrug.24/4			

Special Quotations in large quantities.

MM. Roberts & Co. ont l'honneur d'informer MM. les Pharmaciens Spécialistes de France et de l'Étranger qu'ils se mettent à leur disposition pour des dépôts qu'ils voudraient établir à Londres. On peut avoir tous renseignements en s'adressant à leur maison de Londres ou à Paris.

SPECIAL AGENTS FOR MARIANI'S ELIXIR, EXTRACT PATE, PILLS, SYRUP AND WINE OF COCA, AND FOR VALENTINE'S MEAT JUICE AND LE GRAND'S ORIZA PERFUMERY.

Established]

House in Paris. **ROBERTS & CO., Rue de la Paix 5.**

[1823.

Prize Medals were Awarded to us at the Great International Exhibitions 1851, and 1862, for THE GENERAL EXCELLENCE OF OUR GOODS. ESTABLISHED UPWARDS OF A CENTURY.

BUTLER, McCULLOCH & CO.,

COVENT GARDEN MARKET, LONDON,



WHOLESALE IMPORTERS AND EXPORTERS OF ALL KINDS OF
HERBS FOR CULINARY PURPOSES, in Bulk, Packets, and Bottles.

HERBS, ROOTS, BARKS, & SEEDS for MEDICINAL PURPOSES,
Crude, Crushed, and Powdered.

DISTILLERS OF PERFUMED & MEDICINAL WATERS.

All Powdered and Crushed Articles are prepared in London. Absolute Purity is thus assured.
The greatest care and judgment used in the selection and packing of indents.
REGISTERED TELEGRAPHIC ADDRESS—"ANTIQUITY LONDON."



PRICE LISTS, SAMPLES, AND SPECIALLY LOW QUOTATIONS ON APPLICATION.

COMPOSITION ESSENCE.

"RAIMES & CO."

VERY SUPERIOR IN AROMA AND STRENGTH TO THE PREPARATION USUALLY SOLD.

The following favourable opinions are from those who have tried it:—

Mr. F. JOHNSON, Chemist, Barnsley: "Gives every satisfaction to my customers."

Mr. BASKER, Chemist, Sheffield: "Excellent quality, and well liked by my customers."

MESSRS. NEEDHAM BROS., Chemists, Huddersfield: "Our customers speak very highly of it."

Mr. S——, Chemist, M——: "Gives great satisfaction. I consider it is a very excellent preparation."

Mr. G. WALKER, Chemist, Dewsbury: "I introduced your Composition Essence last winter, and am much pleased with the result."

1/1 per lb. in W. Quarts, 5 per cent. discount; 11d. per lb. net for 1 cwt.

RAIMES & CO., Wholesale Druggists, YORK, & EDINBURGH.

RELIEF FROM COUGH IN TEN MINUTES.

HAYMAN'S BALSAM OF HOREHOUND.

THE SALE IS
INCREASING DAILY.

IT HAS A MOST
PLEASANT TASTE.

The most certain and speedy remedy for Coughs, Colds, Hoarseness, and all disorders of the Chest and Lungs. It has proved itself the most successful preparation ever offered. In the nursery it is invaluable, as the children are fond of it. Immediately it is taken coughing ceases, restlessness is gone, and refreshing sleep ensues. No lady who has once tried it would ever afterwards be without it.

Prepared only by A. HAYMAN, Chemist, NEATH, and sold by all Chemists in London and throughout the Kingdom.
Price 1s. 1½d., 2s. 9d., and 4s. 6d. per bottle.

A MOST NOURISHING FOOD AND VALUABLE MEDICINE.

British Medical Journal—"Children take it well."

British and Colonial Druggist—"The Oil is much above the average, but little taste or smell, while rich in Iodine. It keeps better than the generality, is readily assimilable, and can be taken by persons of delicate gastric organisation without fear of returning."

Retail, Finest Selected, in Bottles only,

PER

¼ Pint, 1/;
½ Pint, 2/;
1 Pint,
3/6;
Quart, 6/6.

FOR WEAKNESS.

INDIGESTION.
JENSEN'S COD LIVER OIL

CONSUMPTION.

Price
in Bulk.

Per
Original Cask,
4/6 per gallon.

In Winchester,
per doz., at
6/- per gallon.

½ doz. same rate

OF GUARANTEED PURITY.
NON-CONGEALABLE.

Prof. Sir CHAS. CAMERON—"A very pure article, quite free from rancid odour or nauseous flavour."

Sole Consignees
and Bottlers,

HERTZ & COLLINGWOOD, 101 LEADENHALL ST., LONDON.

Dr. J. COLLIS BROWNE'S CHLORODYNE.

THE ORIGINAL AND ONLY GENUINE.

IMPORTANT CAUTIONS

From Lord Chancellor SELBORNE, Vice-Chancellor Sir W. PAGE WOOD,
and the LORDS JUSTICES OF APPEAL.

VICE-CHANCELLOR SIR W. PAGE WOOD, by whom the suit in Chancery was first heard, stated in his judgment that 'Dr. J. Collis Browne was undoubtedly the Inventor of Chlorodyne, that the whole story of the Defendant Freeman was as deliberately untrue as the falsehood he had deposed to with reference to the use of his Chlorodyne in the Hospital.'

The VICE-CHANCELLOR also stated, 'that Chlorodyne was a fanciful name, and had application been made sooner, the Court would have given Dr. Browne protection.'

LORD CHANCELLOR SELBORNE coincided with the judgment of the Vice-Chancellor upon this point, and stated 'that had application been made at a proper time and place, the Court would have found means to restrain the Defendant from misrepresenting the decision of the Vice-Chancellor.'

LORD JUSTICE JAMES, on appeal, stated in his judgment, 'that the Defendant Freeman had made a deliberate misrepresentation of the decision of Vice-Chancellor Wood.'

It was proved in Court, on affidavit by Mrs. Forbes, of Paris, that the testimonial published in the *Times*, November 14th, 1865, speaking of the great efficacy of Chlorodyne in Cholera, referred to Dr. J. Collis Browne's Chlorodyne, and that she never used any other, that she had written to the Defendant Freeman to that effect; notwithstanding which notice the Defendant publishes the said testimonial as referring to his medicine.

The Editor of the *Medical Times*, in his report on Chlorodyne, January 13th, 1866, gives information that the Chlorodyne referred to was the medicine introduced by a retired Army Medical Officer, which was Dr. J. Collis Browne; still this is published by the Defendant as testimony to his medicine.

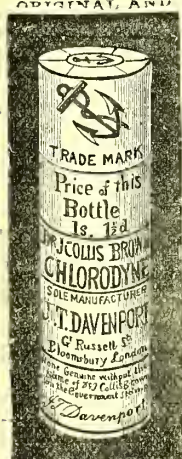
Numerous affidavits from eminent Physicians and others were produced in Court, stating that Dr. J. Collis Browne was the inventor of Chlorodyne, and that when prescribing they mean no other.

The Defendant himself publishes that his compound is in effect and composition quite different to any other preparation; nevertheless he assumes the name, testimonials, &c., of Chlorodyne.

Technicalities in law prevent that protection which the public should justly have against such a course of conduct. It is now incumbent on all who purchase Chlorodyne to see that the name, 'Dr. J. Collis Browne's Chlorodyne,' is engraved on the Government Stamp, as it is not sold otherwise. All other compounds under the name of Chlorodyne are spurious. All attempts at analysis have failed; hence the statement that the constituents of Chlorodyne are known is a misrepresentation.

FURTHER IMPORTANT NOTICE.

The subjoined list of eminent Firms concur with Vice-Chancellor Sir W. Page Wood's statement in Court, that Dr. Collis Browne was undoubtedly the Inventor of Chlorodyne; and that when Chlorodyne, or the Original Chlorodyne, is ordered, they invariably supply Dr. J. Collis Browne's:—



ONLY GENUINE.

Apothecaries' Hall,	London	Frazer & Green,	Glasgow	Morson, T., & Son,	London
Allen, Hanbury & Co.,	"	Gale & Co.,	London	Newbery & Sons,	London
Baiss Brothers,	"	Giles & Son,	Clifton	Oldham, G., & Co.,	Dublin
Banks & Richards,	Birmingham	Goulding, Messrs,	Cork	Parsons & Richardson	Leicester
Barron, Harvey & Co.,	London	Gratton & Co.,	Belfast	Peake, Allen & Co.,	Dublin
Bell, John, & Co.,	"	Grimwade, Ridley,	London	Raines & Co.,	York
Bourne & Taylor,	"	Grindley & Son,	Chester	Raines & Co.,	Edinburgh
Corbyn & Co.,	"	Hearon, Squire & Francis,	London	Sang & Barker,	"
Cox & Gould,	"	Hodgkinson, Tonge & Stead,	"	Sanger, J., & Sons,	London
Curling & Co.,	"	Hopkins & Williams,	"	Sim, James, & Co.,	Aberdeen
Curtis & Co.,	"	Hovenden, R., & Sons,	"	Smeeton, W.,	Leeds
Davy, M'Murdo & Co.,	"	Hunt & Co.,	Exeter	Southall & Co.,	Birmingham
Dobbin, W., & Co.,	Belfast	Hunt, A., & Co.,	"	Sutton, W., & Co.,	London
Drew, Barron & Co.,	London	Johnson, J. H. & S.,	Liverpool	Tomlinson, Hayward & Co.,	Lincoln
Drew, B., & Alexander,	"	Langton, W., & Co.,	London	Treacher, Hodgkinson & Co.,	"
Dunn & Company,	"	Lynch & Co.,	"	Westrup, J. B.,	Kensington
Edwards, W.,	"	Mander, Weaver,	Wolverhampton	Westwood & Hopkins,	Lincoln
Evans, Gadd & Co.,	Exeter	Marsden & Sons,	London	Woolley, James,	Manchester
Evans, Lescher & Webb,	London	Maw & Son,	"	Wyleys & Brown,	Coventry
Ferris & Co.,	Bristol	Meggeson & Co.,	"	Yates & Co.,	London
Foulger, S., & Son,	London	Mackay, John, & Co.,	Edinburgh		

After these public statements in a Court of Equity, and subsequent confirmation by the trade at large, no Chemist can conscientiously use or sell any other compound for Chlorodyne without committing a breach of faith, unjust to patient and physician. The value of the remedy alone creates the great demand.

Sold in Bottles—1s. 1½d., 2s. 9d., 4s. 6d., and 11s. Usual Discount to the Profession.

SOLE MANUFACTURER,

J. T. DAVENPORT, Pharmacist,
88 GREAT RUSSELL STREET, BLOOMSBURY SQUARE, LONDON.

SAVARS COCA WINE.

Introduced to the Trade in 1875.

This Wine is made from selected Green Leaves, and contains all the active ingredients of the plant. The Cocaine and the Ozonine being both held in solution.

In 6/0 Bottles (2,000 Leaves) 57/ dozen.

In 3/6 „ (1,000 „) 33/ „

EVANS, LESCHER & WEBB, EVANS, SONS & CO.,
60 Bartholomew Close, 56 Hanover Street,
LONDON. LIVERPOOL.

Manchester, Birmingham, Montreal, Paris, Sydney,
and Victoria, British Columbia.

*Their Export List, Spanish and English, forms an excellent
advertising medium for Proprietary articles. Circulated to the
Trade in every quarter of the Globe.*

Sole Wholesale Agents,
BEHNSTEIN & VOGT,
LONDON, E.C.

SPECIALITIES—
ACIDS: Benzoic, Gallic
PYROGALLIC, Tannic.
Iodine, Iodoform, Iodides of Alkalies.

DR. HEINRICH BYK, BERLIN.

Bromine, Bromides of Alkalies, Chloralhydrate,
Silver Nitrate, Salts of Gold, Oxalate
of Potash, Pyroxylin.

Correspondence with the
Colonies invited.

28 Jewry Street,

SPECIALITIES—
Abietis. Cloves,
Almonds.
Absynth.
Anisseed.
Angelica.

SPECIALITIES—
Caraway Seed.
Cardamom. Ceyl.
Cedar Wood.
Coriander.
Iridis.
Amber.

Estab. 1838.
**DISTILLER OF ALL
ESSENTIAL OILS,
ESSENCES, AND ETHERS.**

EDWARD BÜTTNER, LEIPSIC.

FOR SAMPLES AND QUOTATIONS APPLY TO
BERNSTEIN & VOGT,
SOLE WHOLESALE AGENTS,
28 Jewry St.,
LONDON,
E.C.

Mace.
Calamus.
Juniper Berries.
Fennel Seed.
Mustard. Nutmegs.

Celery.
Linaloe.
Patchouly.
Pine Sylvestris
Sandal Wood.
Cognac Artific.

The fatal effects frequently following the use
of Narcotics in Patent Medicines suggested to
the Proprietor of

STEDMAN'S TEETHING POWDERS



the advisability of having his Powders tested by
Dr. HASSALL, the result of whose analysis is certified
below, hence vendors need be under no apprehension
of the pain, trouble, and censure connected with
most inquests, the occasional result of fatal doses of
Patent Medicines.

STEDMAN'S TEETHING POWDERS.

THE ANALYTICAL INSTITUTION,

54 HOLBORN VIADUCT, E.C.

LONDON, 29th Nov., 1877.

REPORT ON THE TEETHING POWDER PREPARED BY
MR. JAS. STEDMAN, HOXTON.

I hereby certify that I have purchased a sample of
STEDMAN'S Teething Powder, and have, at the request of
the Proprietor, subjected it to Analysis for Morphia or
Opium in any form.

I am enabled to state that I found the sample in
question to be absolutely free from Morphia, or any other
Alkaloid or constituent of Opium.

Thus STEDMAN'S Teething Powder is favourably dis-
tinguished from similar preparations.

ARTHUR H. HASSALL, M.D.

Thus Vendors need not be under any apprehension of
interference either by Police or Coroner, as the FREEDOM
FROM NARCOTIC removes Stedman's Teething Powders
from the "Scheduled Poisons" List, and prevents the possi-
bility of inquests on account of the administration of these
Powders.

SEIDLITZ POWDERS.

Full size, and prepared with Howard's Materials.

Loose, 5s. 6d. per gross; in 1 doz. Coloured
Boxes, Wrappers, &c., 6s. per doz. net.

TERMS—CASH WITH ORDER.

125 NEW NORTH ROAD, LONDON, N.

The Chemische Fabrik auf Actien, vormals E. Schering, Berlin,
MANUFACTURERS OF SCHERING'S
PURE CHEMICALS

PARTICULARLY OF

ACID, GALLIC — — — —	Almost white needles ... — —	Freely and entirely soluble in alcohol or water.
" PYROGALLIC — — —	Bi-sublimed, white, bulky ... — —	Ditto ditto ditto.
" SALICYLIC (Kolbe's) — — —	White, powder, crystallised, and dialysed	Dissolves colourless in water or alcohol; purest for medicine.
" TANNIC — — — —	Lightest crystals ... — — — —	Dissolves almost colourless in water, alcohol, and ether.
" " — — — —	Powder and granulated ... — — —	Dissolves freely in water, alcohol, and ether.
CELLOIDINE (Patent) — — —	Gelatine plates ... — — — —	Purest Pyroxylin; inexplusive.
CHLORAL HYDRATE — — —	White cake and crystal ... — —	See Liebreich's, below.
CHLORAL HYDRATE (Liebreich's)	Transparent rhomboidals (facsimile of Dr. Liebreich's)	Will not decompose by age.
CROTON CHLORAL — — —	Shiny crystalline scales. (Powder form most objectionable)	Free from foreign chlorides.
GLYCERINE — — — —	S.G. 1260, double distilled, brilliantly white, odourless; also lower S.G. and qualities	Free from lime, chlorides, metals; will stand severest chemical tests.
IODINE — — — —	Resublimed, fine scales ... — — —	Purest.
IODOFORM, Absolut. — — —	Crystals and powder of soft touch ...	Purest; made by electrolysis.
PARALDEHYD ... — — —	... ..	Absolutely purest.
POTASS. BROMIDE ... — —	Fine white dry regular crystals ...	Perfectly free from iodide, and the most free from chloride.
" PERMANGANATE — — —	Large and small crystals ... — —	Chemically pure.
" IODIDE — — — —	Fine white dry regular crystals ...	Apply Barytic and other tests. This will never change colour.
SODA SALICYLATE, and other Salicylates	White powder and crystals ... — —	Freely soluble in water and alcohol.

H. FINZELBERG, of Andernach-on-Rhine.

ERGOTINE, pure Dialysed ...	Brown colloid, purified by Dialysis	Free from all saline matter present in the ordinary Ergotine and extracts.
FERRUM OXYD. (5% Dialysed)	Transparent brown liquid, purified by Dialysis	Free from all saline matter. Diluted by ten times its weight of water, will stand the test of Nitrate of Silver.
PEPSIN PORCI (100%) ... — —	White, sweet, odourless powder —	Freely soluble in water, not hygroscopic, and will not deteriorate; will dissolve (by Wittstein's test) 100 parts of white of egg and 250 parts of fibrine.

CONRAD ZIMMER, of Frankfurt-on-the-Main.

QUININE, Sulphate ... — — —	Whitest and most bulky crystals ...	Utmost purity warranted.
" Muriate ... — — —	" " " ...	" " "

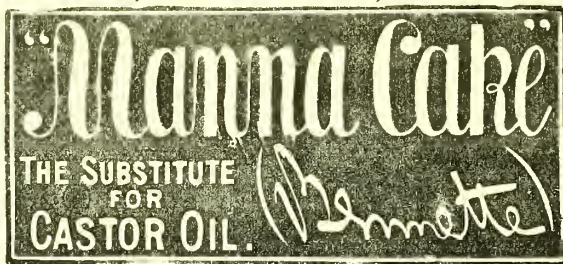
SOLE WHOLESALE AGENTS—

A. & M. ZIMMERMANN, 27 MINCING LANE, LONDON, E.C.*For Quotations, &c., apply to Wholesale and Export Drug and Chemical Houses.*

TO BRITISH, COLONIAL, AND FOREIGN CHEMISTS.

Price 12/- per
box of
12 Packets.

Retail, 1/3 per
packet of
1 dozen,
(1½d. each).



REGISTERED TRADE MARK, No. 22,133.

RECOMMENDED BY THE FACULTY

Milder than Castor Oil, certain, efficacious, and most agreeable. A first-class Family Medicine for every household. Highly approved of by adults; "children take it readily and do not suspect its properties." Admirably adapted for women at all times, and during the whole course of pregnancy. Does not gripe, and leaves no bad effect as Castor Oil does. A digestive tablet and sweet to the taste.

To COLONIAL & FOREIGN HOUSES.

Terms, 12s. per gross, less discount for cash against shipping documents. Printed matter is included with this. On orders of 50 gross and upwards at a time printed matter is supplied in any language. On orders over 100 gross arrangements will be made for advertising in any country should advertisements not be running.

Testimonials from Medical Men and others on application.

Manufactured by BENNETTE & Co., 8 & 10 Station Street, LEICESTER.
LONDON WAREHOUSE—11 LONG LANE, E.C.

Trade Notice.]



[Trade Notice

ATKINSON & BARKER'S ROYAL INFANTS' PRESERVATIVE.

Established by 90 years' experience as a safe and effective Medicine.

Sold universally by Chemists and Patent Medicine Dealers.

WHOLESALE AND EXPORT ORDERS SUPPLIED FROM THE MANUFACTORY—

11 RUSSELL STREET, DOWNING STREET, MANCHESTER.

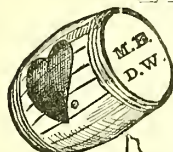
SHOW CARDS AND BILLS ON APPLICATION.

METHYLENE.
Obtained by the action of Metallic Zinc on Chloroform and Alcohol.
Discovered to be a general Anæsthetic by Dr. RICHARDSON in 1867.
1-lb. Bottles, 16s.; 8-oz., 8s. 6d.; 4-oz., 4s. 6d.; 2-oz., 2s. 6d.
COMPOUND ANÆSTHETIC ETHER,
For producing Local Anæsthesia.
In 4-oz., 10-oz., and 20-oz. Stopped Bottles, 2s., 4s., and 7s.
OZONIC ETHER.
In 2-oz., 4-oz., 8-oz., and 16-oz. Stopped Bottles, 2s., 3s. 6d., 7s., and 12s.
PEROXIDE OF HYDROGEN.
First introduced as a medicine by Dr. RICHARDSON
ETHYLATE OF SODIUM
(Dr. RICHARDSON'S Formula), for removing Nævi, &c. In ½-oz. & 1-oz. Bottles, with elongated Stoppers for applying the Caustic, 2s. 6d. & 4s.
STYPTIC COLLOID,
or promoting the Healing of Wounds by the first intention
In 2-oz. and 4-oz. Bottles, with brush, 2s. 6d. and 4s. 6d.; 16-oz., 12s.
CHARCOAL CAPSULES,
Containing Pure Vegetable Ivory Charcoal.
In Boxes, 2s. 6d. each.

OXFORD ST. 147

J. ROBBINS & CO.

The Mormon Elder's DAMIANA WAFERS.



The most Powerful
INVIGORANT
Ever Produced.

Permanently Restores those
Weakened by Early Indiscretions.
Imparts Youthful Vigor. Restores
Vitality. Strengthens and
Invigoretes the BRAIN & NERVES.
A Positive cure for **IMPOTENCY**
& Nervous Debility. *Prompt, Safe*
and *Sure.* 4s per box, 6 for 20s.
mailed to any address in the World
on receipt of price. *Send for Circular*

ADDRESS

F. B. CROUCH,

202 Grand St., New York.

European Agents—THOMPSON, MILLARD & CO., Curtain Road
and Holywell Lane, London, E.C.

<p>Hooper's</p> <p>BEST IN MARKET.</p> <p>Most attractively put up.</p> <p>Numerous varieties stocked and any combination made.</p>	<p>Very handsome 1-lb. tins</p> <p>CHLORATE OF POTASH PELLETS,</p> <p>FOR COUNTER USE,</p> <p>2/ or post free 2/4.</p> <p>Well shown, a good and profitable sale is certain.</p> <p>And in attractive 6d. and 1/ boxes. 2 & 4/ doz.</p> <p>Potassium Pellets.</p> <p>ALWAYS ASK FOR "HOOPER'S."</p>	<p>Hooper's</p> <p>Sell freely. Very attractively got up. Absolutely pure. Always give satisfaction.</p> <p>Flexible Capsules.</p> <p>We fill any combination in Oil, Paste, or Powder.</p>	<p>1 doz. handsome circular boxes</p> <p>COPAIBA CAPSULES,</p> <p>30 in each, 7/6 per doz. Loose, 10/6 per 1,000.</p> <p>1 doz. neat round boxes</p> <p>ENGLISH SANDAL OIL,</p> <p>24 in each, 16/6 per doz., or 32/6 1,000.</p> <p>WRITE FOR DETAILED PRICE LIST.</p>
--	---	---	--

BARTLETT HOOPER & CO., MANUFACTURING CHEMISTS,
43 KING WILLIAM STREET, LONDON BRIDGE, E.C.

VOID CAPSULED PILLS.

(Of the British Pharmacopœia and other Standard Authorities.)

ORIGINATED 1870 BY **McKESSON & ROBBINS**, NEW YORK, U.S.A.
LONDON AGENCY—S. MAW, SON & THOMPSON, 7 to 12 Aldersgate Street, E.C.

Can be had of Messrs. BURROUGHS, WELLCOME & CO., Snow Hill Buildings, London, E.C.
Messrs. GRIMWADE, RIDLEY & CO., Mildmay Chambers, 82 Bishopsgate Street, E.C.,
And the Principal Wholesale Houses in the Trade throughout Great Britain and Ireland, at the same terms.

“McK.&R.”

DOZ. BOTTLES

containing 25 PILLS

containing 100 PILLS

The reputation of Gelatine-coated Pills has been created by our manufacture. In ordering, be careful to specify "McK. & R. PILLS."

TERMS TO THE TRADE AND REVISED LIST OF FORMULAS MAILED FREE ON APPLICATION.

Private Formulas of 3,000 or more Pills made and Capsuled to order for Hospitals and large consumers at special quotations.

Address: **McKESSON & ROBBINS,** 91 Fulton Street, New York, U.S.A.
38 Mark Lane, LONDON, E.C.

MORISON'S PILLS, POWDERS AND OINTMENT.

The most Safe, Efficacious, and Prompt **VEGETABLE MEDICINE** for Family Use.
COMPOUNDED OF THE PUREST VEGETABLE INGREDIENTS ONLY.

FIFTY-FIVE YEARS OF UNINTERRUPTED SUCCESS.

Pills in Boxes at 7½d., 1s. 1½d., 2s. 9d., 4s. 6d., and 11s. Powders, 1s. 1½d. Ointment, 1s. 1½d. and 2s. 9d.

Wholesale: BRITISH COLLEGE OF HEALTH, 33 Euston Road, London;
And of the Principal Chemists and Druggists throughout the Kingdom.

BUYERS ARE CAUTIONED TO SEE THAT THEY GET THE



GENUINE

DR. JOHN HOOPER'S PILLS,

Which may be known by the Name of the Inventor being on the Government Stamp

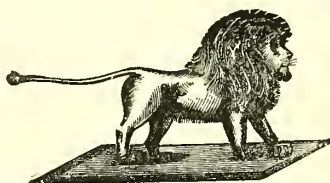
Handbills and Show Cards will be sent on application to

MAY, ROBERTS & CO., 9 CLERKENWELL ROAD, LONDON, E.C.

AMERICAN BUYERS are particularly Cautioned!!

Telegraphic Address—"FEEDING BOTTLES LONDON."

TRADE MARK
REGISTERED
OVER ALL THE
GLOBE.



E. BURGESS' LION OINTMENT AND PILLS

Cure the worst and most obstinate cases of Ulcers, Abscesses, Cancers, Tumours, Polypi, Carbuncles, Piles, Poisoned Wounds of all kinds (including Dog and Venomous bites), and every form of Eruption and Skin Disease; also Ulcerated and Cancerous Affections peculiar to Females, without the aid of Lancet or Knife.

Numbers have been cured after leaving various London Hospitals as incurable, or curable only by amputation. Photographs of Cases Cured, neatly framed for exhibition, Transparencies, Bills with Name, &c., forwarded direct or through any Wholesale House. Plenty of Advertising Matter supplied to Chemists willing to push the sale.

SPECIAL NOTICE TO AUSTRALIAN CHEMISTS.—Messrs. Lynch & Co., of Melbourne, have in stock a supply of these remedies, one box of which will ensure a sale by proof of efficacy.

The Ointment is put up in air-tight grease-proof boxes, and will keep good any length of time in any climate. The Pills are in stout wooden boxes, and also retain their virtue for years. **Prices, 1s. 1½d., 2s. 9d., 4s. 6d., 11s., and 22s. each. Usual Wholesale Terms.**

E. BURGESS, 117 High Holborn, and Kingsgate Street, LONDON, W.C.

W. F. SMITH'S TASTELESS DANDELION ANTIBILIOUS PILLS,

Price, 1s. 1½d. and 2s. 9d. per Box.

Registered. **TARAX. AND PODOPH.** *[Registered.]*

A NON-MERCURIAL LIVER MEDICINE, specially useful to the habitually constipated, and safe for all ages. Worthy of trade notice. Reliable, and rapidly increasing in public acceptance.

Urgent caution needed against injurious imitations.

PREPARED ONLY BY

W. F. SMITH, M.P.S.,

280 WALWORTH ROAD, LONDON.

To be had of the usual Houses at Home and Abroad.

DINNEFORD'S FLUID MAGNESIA



*The most efficacious antacid and mild aperient for
Delicate Constitutions, Ladies, Children, and
Infants.*

DINNEFORD & CO.,

Pharmaceutical Chemists,
180 NEW BOND STREET, LONDON,
AND ALL WHOLESALE DRUGGISTS.

A WONDERFUL MEDICINE!



TRADE MARK.
No. 1416.

Between thirty and forty years ago a Medicine was introduced to the public and suffering humanity was invited to try the same.

The Proprietor knew from experience that success was certain, but the human breast is so imbued with prejudice, that it forms one of the strongest barriers to break down and the greatest enemy to overcome before any headway can be made towards the mansion of success. Truth has often proved itself to be "stranger than fiction," and it is a fact as solid as truth that

BEECHAM'S PILLS

have now become one of the leading Patent Medicines of the present day. From north to south, and from east to west, they are to be found in the homes of the rich and the poor. All classes of society use them, and they are by thousands declared to be

WORTH A GUINEA A BOX.

For a Weak Stomach, Impaired Digestion, and all Disorders of the Liver, they act like "MAGIC," and a few doses will be found to work wonders on the most important organs in the human machine. They strengthen the whole muscular system, restore the long-lost complexion, bring back the keen edge of appetite, and arouse into action, with the ROSE-BUD of health, the whole physical energy of the human frame. These are "FACTS" admitted by thousands, embracing all classes of Society, and one of the best guarantees to the Nervous and Debilitated is, BEECHAM'S PILLS have the LARGEST SALE of any Patent Medicine in England.

In South Africa BEECHAM'S PILLS have the largest sale of any Patent Medicine ever introduced into that part of the World.

All Patent Medicine Dealers abroad will find BEECHAM'S PILLS one of the most profitable and one of the best selling articles in the Market. The demand for them is regular, and all Foreign Houses who are desirous of getting a First-class Patent Medicine are respectfully requested to get BEECHAM'S PILLS from the leading Wholesale Houses in England (as no business will be done with any Foreign House by the Proprietor direct).

CAUTION.—The Public are requested to notice that the words "BEECHAM'S PILLS, ST. HELENS," are on the Government Stamp affixed to each Box of the Pills; if not on, they are a Forgery.

Prepared only, and Sold Wholesale and Retail, by the Proprietor,

THOMAS BEECHAM, ST. HELENS, LANCASHIRE, ENGLAND.

In Boxes, 1s. 1½d. and 2s. 9d. each.

N.B.—FULL DIRECTIONS ARE GIVEN WITH EACH BOX.

BLACKWELL'S

GENUINE

DURHAM BULL

TOBACCO

AND

CIGARETTES

(NORTH CAROLINA, U.S.A.).

BLACKWELL'S
DURHAM LONG CUTS,
FOR PIPE AND CIGARETTES.

FREE FROM NITRATES AND NICOTINE.

Disinterested Testimony of the highest character, which proves that
"BLACKWELL'S DURHAM LONG CUT"
 Is Superior to any Tobacco ever before offered to the Public.

Dr. AUGUST VOELCKER, F.R.S., *Consulting Chemist to the Royal Agricultural Society of England, after making a thorough analysis of the organic and inorganic parts of various samples of Leaf Tobacco, says:—*

"With regard to the Leaf Tobacco from which '**BLACKWELL'S DURHAM LONG CUT**' is manufactured, I find in this magnificent Tobacco merely traces of Nitrates, which, perhaps, is one of the reasons this Tobacco has a very mild taste, for in all biting, strong Tobaccos I find, invariably, that Nitrates are present in considerable proportion. Another and still more important fact which my analysis has brought to light is that this Tobacco contains so little Nicotine, which I am inclined to regard as a good feature. Strong and inferior Tobaccos are found to contain much more Nicotine—some as high as three or four times as much as I find in this."

The section of the country to which Durham is the natural outlet is especially adapted to the growth of this Leaf, and we secure the pick of these offerings, and manufacture them into "**BLACKWELL'S DURHAM LONG CUT.**" Herein it is we claim that for a FINE, PURE SMOKE, DELICACY OF TASTE AND FLAVOUR, we offer an article unsurpassed by anything on the market.

BLACKWELL'S
GENUINE DURHAM BULL
SMOKING TOBACCO.

BLACKWELL'S Durham Tobaccos, being pure and unsweetened, pass the Customs as such, and do not require the extra Wrapping and Stamp Duty.

FOR SAMPLES AND PRICES APPLY TO THE SOLE CONSIGNEES—

INGRAM & ROYLE,

52 FARRINGDON STREET, LONDON, E.C.,
 AND AT
 LIVERPOOL AND BRISTOL.



FREEMAN'S CHLORODYNE



THE ORIGINAL AND ONLY TRUE.

It is the Greatest Medical Discovery of the present Century, and is regarded as a boon to mankind.

It is the best known remedy for Coughs, Colds, Consumption, Whooping Cough, Bronchitis, and Asthma.

It effectually checks and arrests those too often fatal Diseases—Diphtheria, Diabetes, Fever, Croup, Ague, &c.

It acts like a charm in Diarrhoea, and is the only known Specific in Cholera and Dysentery.

It effectually cuts short all attacks of Epilepsy, Hysteria, Palpitation, Convulsions, and Spasms.

It is the only Palliative in Rheumatism, Gout, Cancer, Toothache, Neuralgia, Sciatica, Lumbago, &c.

It rapidly relieves pain from whatever cause, allays the irritation of Fever, soothes and strengthens the system under exhaustive diseases, restores the deranged functions, stimulates healthy action of the secretions of the body, gives quiet and refreshing sleep, and marvellously prolongs life. It may be taken by old and young at all hours and times, according to the Directions.

It is extensively used by Medical Men in their official and private practice, at home and abroad, who have given numerous written testimonials of its wonderful efficacy.

SPECIMEN TESTIMONIALS.

From JOHN TANNER, M.D., L.R.C.P., M.R.C.S., L.S.A., L.M., Physician to Farrington Dispensary, London; Physician to the Rev. C. H. Spurgeon's Metropolitan College, &c.

102 HARLEY STREET, CAVENTISH SQUARE, W.

'It gives me great pleasure to bear testimony in favour of FREEMAN'S Chlorodyne. I have prescribed it extensively, and in cases of Asthma, Chronic Bronchitis, the last stage of Pnathisis, and the Winter Cough of the aged, I have never found any substitute or chemical combination its equal.'

From J. DODD SWALLOW, M.D., M.R.C.S., Eng.; L.A.S.; Medical Officer to the London City Missions, &c., &c.

213 CLAPHAM ROAD, LONDON, S.W.

'I have great pleasure in stating that I am constantly prescribing FREEMAN'S Chlorodyne. In Consumption and Asthma, as a Sedative; in Cancer, and in cases of Diarrhoea and Dysentery, I am daily witnessing its striking effects, and believe that the thanks of the profession are due to Mr. FREEMAN for his efforts to bring prominently before the profession so valuable and reliable a remedy as the Chlorodyne which bears his name.'

264 PETIT SAONNE, GENEVA, SWITZERLAND, January 6, 1886.

DEAR SIR,—I send by same post £1 16s., or 46 francs, for 8 bottles, value 4s. 6d. each. Your Chlorodyne has been used in a case of Cancer, notorious at St. Leonards-on-Sea, where Dr. Penhall and Dr. Harvey attended, and the case was given up as incurable, for the leg ought to have been cut off, and the patient was too weak to stand operation. Now, Dr. Metcalfe said the same thing, and your Chlorodyne cured the person, which, indeed, is my servant, after six years being still alive and perfectly well. I think it is due to you, as the Inventor of the remedy, to state the fact, that others in similar circumstances may never despair as long as life is in the body. I authorise you to use my letter as you may think best, and also my name, to present people being humbugged by other rubbish, &c.

To Mr. RICHARD FREEMAN.

Yours truly,

WALTER SAVAGE LANDOR.

Sold by Chemists and Patent Medicine Dealers all over the world, in bottles, 1s. 1½d.; 2 oz., 2s. 9d.; 4 oz., 4s. 6d.; half-pints, 11s.; and pints, 20s. each; and by the Inventor, RICHARD FREEMAN, 70 Kennington Park Road, London, S.E.

Purchasers are cautioned not to have palmed upon them any substitute. See that the Trade Mark, "The Elephant," is on the wrapper, &c., and that the words Freeman's Original Chlorodyne are engraved on the Government Stamp, which is the only true Chlorodyne.

N.B.—Lord Chancellor Selborne, Lord Justice James, and Lord Justice Mellish decided in favour of Freeman's Original Chlorodyne, and against Brown and Davenport, compelling them to pay all costs in the suits. See Times of July 24, 1875.

WYLEYS' GELATINE COATED OVAL PILLS.

The only Gelatine Coated Oval Pills of ENGLISH MANUFACTURE in the Market. Special List of REDUCED PRICES on application.

POWDERED DRUGS. All ground in our own Mills, and of Guaranteed Purity.

EXTRACTS (ENGLISH).

CONCENTRATED INFUSIONS AND DECOCTIONS. GRANULAR EFFERVESCENT PREPARATIONS.

GELATINE COATED HORSE BALLS (PATENTED).

Forwarded on application {PRICES CURRENT, LIST OF SPECIALITIES, PILL LIST (GELATINE OR PEARL COATED).

WYLEYS & CO., COVENTRY.

LONDON ADDRESS—1a BURY STREET, ST. MARY AXE, E.C.

BULLOCK'S PEPSINA PORCI. DOSE— 2 to 4 grains.

Since the introduction by Dr. LIONEL BEALE of PEPSINA PORCI, Mr. BULLOCK has devoted special attention to its manufacture.

BULLOCK'S ACID GLYCERINE OF PEPSINE, DOSE— 1 to 2 drms.

Possesses at least three times the digestive power (and in most cases considerably more) than any other preparation of Pepsine and Glycerine, or fluid form of Pepsine whatever.

May be prescribed with most substances compatible with Acids. In 4 oz., 8 oz., and 16 oz. Bottles, and in Bulk.

Messrs. BULLOCK & CO. beg to direct attention to an article by G. F. DOWDESWELL, Esq., B.A. (Cantab.), F.C.S., F.L.S., &c., on "Medicinal Pepsine and Artificial Digestion," which appeared in the Practitioner for March, 1886. In this paper Mr. DOWDESWELL gives the results of upwards of 200 experiments which conclusively demonstrated the marked superiority of BULLOCK'S PEPSINA PORCI and ACID GLYCERINE OF PEPSINE over every other Pepsine or Preparation of Pepsine—ENGLISH, FRENCH, GERMAN, or AMERICAN; and confirmed the equally favourable reports of Dr. FAYY (1863), Professor TUSON (1870), and the late Professor GARROD (1878), as to the pre-eminent value of BULLOCK'S PEPSINA PORCI. It may be added that many Pepsines and their preparations sold are inert.

* * In prescribing either of the above preparations, it is suggested to insert in parenthesis as follows (BULLOCK).

J. L. BULLOCK & CO., 3 Hanover St., Hanover Sq., LONDON, W.

HEARN, RIDDELL & CO.,

GLASS BOTTLE MANUFACTURERS,
381 to 383 KINGSLAND ROAD, LONDON, E.



Glass Bottles of every description, either Plain or Stoppered, made in White, Blue, Amber, Actinic Green, or any other colour required. Screw Nickel Capped Pomades, Honey Pots, Jelly Jars, &c., &c.

Makers of Opal Glass Covered Pots, in all sizes, which are far more Handsome and Cheaper than Earthenware.



H. B. & CO.'S PATENT GLASS SCREW STOPPERED FEEDING BOTTLES are the MOST PERFECT and Best to be obtained, and command a Ready Sale wherever introduced.

Special Attention given to Quality. Quotations Post Free to any part of the world on application. The above will be found the BEST and CHEAPEST HOUSE in the TRADE.

FOR
DISPENSING, DRUGS,
OILS,
MINERAL WATERS,
PERFUMERY,
PATENT MEDICINES,
&c., &c.

GLASS BOTTLES

MANUFACTURED BY

KILNER BROS.

FOR
FEEDING,
In GREEN &
WHITE GLASS,
and all
Kinds of Fittings.
Best Quality.

No. 3 GREAT NORTHERN GOODS STATION, KING'S CROSS, LONDON.

HOME and FOREIGN BUYERS are invited to Correspond with us, as we have a very LARGE SELECTION to choose from
Send for our Illustrated Price Current.

DISPENSING BOTTLES AND PHIALS.

We supply our celebrated 6 and 8 oz. Bottles at 8/ per gross. Name and address can be had on them if required, no extra charge. Also our White Moulded Phials at very low prices.

Send copy of order required, and get estimate from us before ordering of any other house.

I. ISAACS & CO.,
GLASS BOTTL MANUFACTURERS,
25 Francis Street, Tottenham Court Road, London, W.C.
Established upwards of 50 years.

PURE SPIRITS OF WINE.

60 o.p., 20/3 per gall. ; 56 o.p., 19/9 per gall.

1/ per Gall. Discount for Cash with order.

Further allowance for quantity. STEAM STILL ONLY.

GEORGE PHILLIPS & CO.,
ST. ANDREW'S DISTILLERY, CLERKENWELL RD.,
LONDON, E.C.

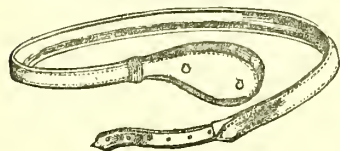


FIG. 1.

TRUSSES.

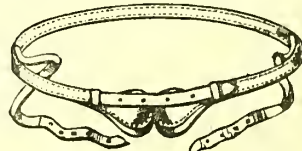


FIG. 2.

The Best and Cheapest Trusses of all kinds in the Wholesale and Export Market are manufactured by

H. M. COLWELL.
ELASTIC STOCKINGS, SUSPENDERS, AND SURGICAL BANDAGES OF ALL KINDS.
WHOLESALE AND EXPORT.

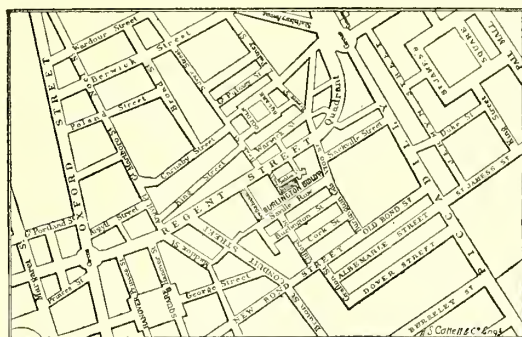
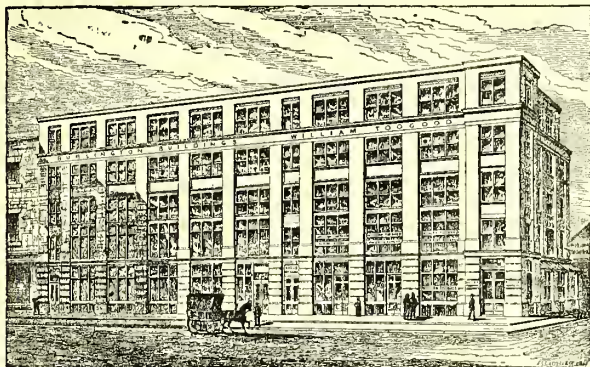
THE LARGEST SHIPPERS IN THE TRADE.

ILLUSTRATED PRICE LIST POST FREE TO ANY ADDRESS.

Estab. 1832.]

116 NEWINGTON CAUSEWAY, LONDON, S.E.

[Estab. 1832.]



WILLIAM TOOGOOD'S NEW PREMISES.

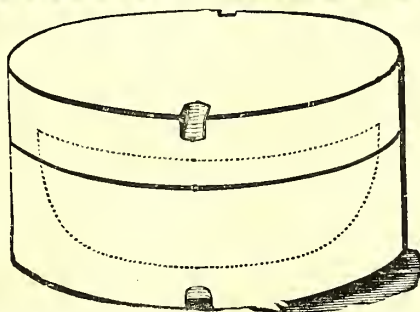
WILLIAM TOOGOOD,
WHOLESALE AND EXPORT
GLASS BOTTLE MANUFACTURER
 AND
DRUGGISTS' SUNDRYMAN,
 HAS REMOVED FROM
 35, 36 & 37 MOUNT STREET, GROSVENOR SQUARE, W.,
 TO
 BURLINGTON BUILDINGS,
 HEDDON STREET, REGENT STREET, LONDON, W.

TOOGOOD'S IMPROVED PATENT
EARTHENWARE COVERED POTS

Are claimed to be the most perfect and convenient yet offered to the Trade, and possess the following Advantages:—

1st.—An India-rubber Band passed vertically over the pot is kept in its place by the notches, and effectually secures the lid; for travelling this supplies a want greatly needed.

2nd.—The Covers being made quite flat, labels can be affixed with ease, and without creasing.



3rd.—The inside of the Pots being rounded or egg-shape, the contents can be entirely removed without waste.

4th.—Great attention has been paid to insure accuracy of contents.

PRICES, per gross.

$\frac{1}{8}$	$\frac{1}{4}$	$\frac{1}{2}$	$\frac{3}{4}$	1	$1\frac{1}{2}$ oz.
18/-	18/-	18/-	20/-	22/-	24/-
2	3	4	6	8 oz.	
27/-	34/-	42/-	54/-	66/-	

AUSTRALIAN AGENCY AND SAMPLE ROOM:

Mr. A. I. JOSEPH, Bond Street, Sydney.

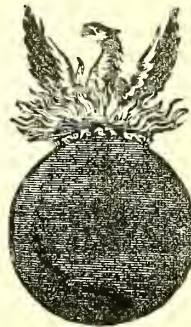
Telegraphic Address: "TOOGOOD LONDON."

Telephone No. 3834.

William Toogood's Price Current of Glass Bottles, Measures, Earthenware, Druggists' Sundries, &c., will be forwarded post free upon application.

SPECIAL ATTENTION GIVEN TO SHIPPING ORDERS.

Starching made easy and pleasant.

Prevents the iron sticking
to the linen.Suitable for hot or cold
water starch.Sold in 1d., 3d., 6d., and 1s. Packets, and in Large Boxes, for
Hotels, Laundries, &c., 5s., 10s., and 20s. each.Wholesale by Maw & Sons, Evans, Sons & Co., Southall
Bros. & Barclay, Wyleys & Co., Sanger & Sons, &c.**COLTHURST & HARDING,**PHENIX COLOUR WORKS, BRISTOL,
*Contractors to the Admiralty, the India Office, and
leading Railway Companies. Manufacturers of***WHITE LEAD, ZINC WHITE,****PAINTS & COLOURS** OF ALL
KINDS.**MIXED PAINTS READY FOR USE,**
In Tins, 1, 2, 4, 7, and 14 lbs. each.**TEREBINE & PATENT DRYERS.****HIGH-CLASS VARNISHES**Of all kinds, for Coachbuilders, Decorators,
and Japanners.**OIL BOILERS, REFINERS & MERCHANTS.**
Export Orders receive special and prompt attention.**BALL DENOTES
COLOUR OF PAINT.****B. NOAKES & CO.,**

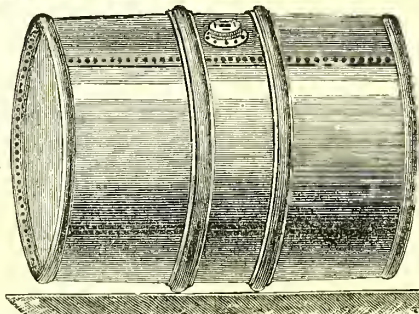
MANUFACTURERS OF

Metallic Casks, Drums, & Kegs

ENAMELLED, PLAIN, AND DECORATED

TIN CANISTERS AND BOXES,FOR PACKING CHEMISTS' AND DRUGGISTS'
SUNDRIES.**ENAMELLED SHOW CARDS.**

IRON BARRELS,

CAPACITY 40 TO 120 GALLONS
AS PER ILLUSTRATION.Cable and Telegraphic Address—
"NOAKES LONDON."These large Iron Casks, similar to sketch, can
be handled with equal facility to wooden barrels,
and, owing to their strength and durability, can
be used over and over again for an indefinite
period. They are perfectly liquid tight, being
tested at a very high air pressure, and, unlike
wood, do not absorb any of the contents. They
are all fitted with interchangeable screw bungs,
and can also be fitted with screw plug in head,
for draw-off tap.They are specially adapted for all kinds of
Chemical Products, Sulphuric Acid, Glycerine,
Spirits, Oils, Turpentine, Petroleum, Benzoline,
Varnishes, Tar, Naphtha, Mineral Extracts, and
Inflammable Liquids of every description.
We are making them in three qualities,
"Black Iron," "Lead Coated," and "Tinned."

PRICE LIST ON APPLICATION.

Offices and Works: 142 SPA ROAD, BERMONDSEY, LONDON, S.E.

EWEN'S GUARANTEED PURE LARD

Trade Mark.

ORIGINAL & BEST BASIS
FOR OINTMENTS, &c.

Trade Mark.

Adeps Præp. }
Adeps Benz. } EWEN'SCan be obtained through any
WHOLESALE HOUSE.Mutton, Beef, Veal, and Deer Suet and Beef Marrow,
Clarified Trotter and Neats' Foot Oil.**TOILET SOAP** from 5s. to 22s. per cwt.**EWEN'S** Clarified Fat Works,
Perfumery and
Toilet Soap Factory,
5 HATFIELD STREET, LONDON, S.E.**W. H. B. WHITE } BEESWAX.
W. H. B. REFINED }**

CERTIFICATE OF ANALYSIS.

ROYAL INSTITUTION LABORATORY,
Liverpool, Sept. 4th, 1886.

MESSRS. W. H. BOWDLEAR & CO.

GENTLEMEN,—I have carefully analysed a cake of White Wax
stamped "Pure W. H. B. Beeswax, W. H. Bowdlear, Boston,
Mass., U.S.A." with the following result:—Melting point
150° F., specific gravity 9635. There is no Paraffine, Resin,
fatty matter, or other adulterant present, and I find it to be
Pure White Beeswax.I remain, yours respectfully,
EDWARD DAVIES, F.C.S. and F.I.C., &c.We will deliver our goods, carriage paid, to any city or town in the world in
15-cwt. lots.

CABLE ADDRESS—"BOWDLEAR BOSTON."

W. H. BOWDLEAR & CO.,
147 Pearl Street, BOSTON, MASS., U.S.A.**JAMIESON & CO.,**

MANUFACTURERS OF

Harness Composition,

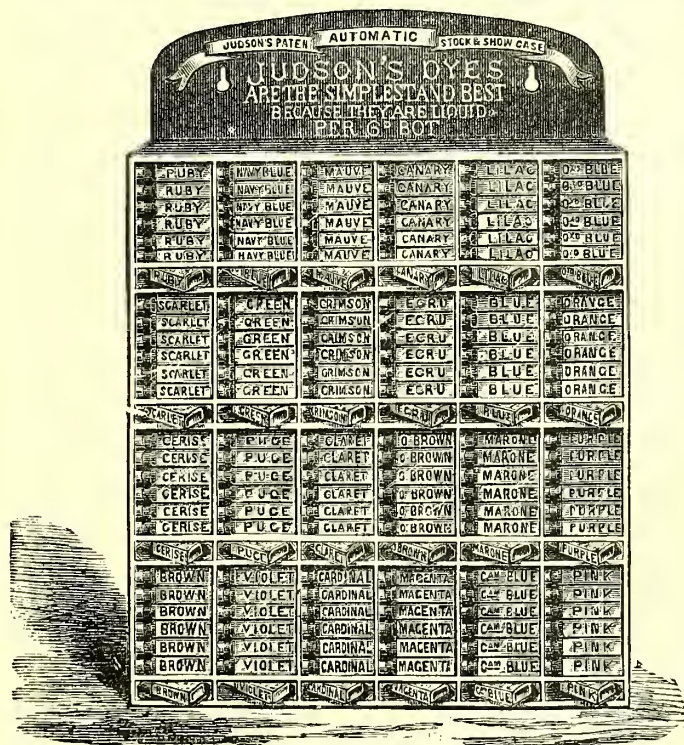
OIL PASTE & LIQUID

SHOE BLACKINGS,**Dubbin (Yellow & Black).**The above articles are made from the best ingredients only, and
have stood the test of time and of all climates.Sold by all Wholesale and Retail Dealers throughout
the United Kingdom and Colonies.LONDON, E.C.:
35 SKINNER STREET.ABERDEEN:
WHITEHOUSE STREET.**Matthews's
Fullers 6d. & 1s.
Boxes.
Earth.**Used in
the Royal
Nurseries,
and highly
recom-
mended by the Faculty; it
protects the Skin from cold
winds, chaps, &c., and pre-
serves the Complexion.

SOLD BY ALL THE WHOLESALE HOUSES.

ROUSE & CO., 12 WIGMORE STREET, LONDON.

THE LATEST INVENTION!!!



THE NEW PATENT SHOW CASE,

SHOWN IN THE ABOVE DRAWING,

Is made to hold 7 Bottles of each of the 24
Leading Colours of

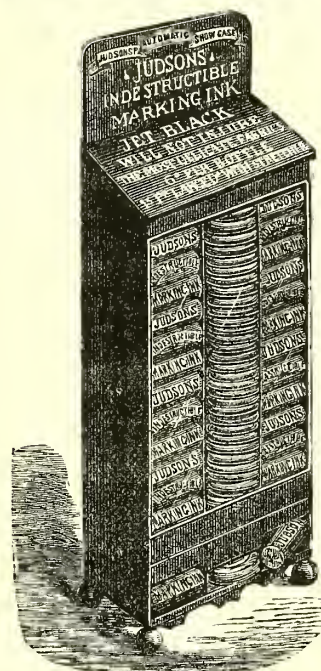
“JUDSON'S DYES.”

CASE WITH CONTENTS COMPLETE,

48/- (subject).

This is the most attractive and convenient Show Case ever offered to
the Trade; may be hung up, or will stand on counter.

The Bottles are so arranged that when one is removed another
immediately takes its place.



AUTOMATIC SHOW CASE,

TO CONTAIN

3 dozen 6d. and 3 dozen 1s.

OF

JUDSON'S "INDESTRUCTIBLE" MARKING INK.

PRICE COMPLETE WITH CONTENTS,

36/- (subject).

To stand on counter, or may be hung on wall.

Wherever these Cases are shown the sale is very
large, and this Marking Ink, which is an entirely
new invention, is the only Marking Ink
ever invented that is absolutely indelible.

DANIEL JUDSON & SON, L^{IM}.

77 SOUTHWARK STREET, LONDON, S.E.



THE SANITARY DISINFECTING COVER

(GREENBURY'S PATENT),

For Slop Pails, Commodes, &c.

This cover has a chamber which can be filled with Condy's Fluid or other Disinfectant. By pressing the ball in handle a spray is injected, sufficient to disinfect or deodorise the contents. Sizes—7 $\frac{1}{2}$ ", 8 $\frac{1}{2}$ ", 9 $\frac{1}{2}$ ", 10 $\frac{1}{2}$ ", 11 $\frac{1}{2}$ ", 12 $\frac{1}{2}$ ", 7" each, subject.

MILNE, SONS & MACFIE,

2 King Edward St., Newgate St., LONDON, E.C.

FOR CLEANING PLATE.

BRADLEY & BOURDAS'S
ALBATUM or WHITE ROUGE,

For Cleaning Gold, Silver, and Plated Goods.

Since its introduction as a substitute for the ordinary Rouge, a quarter of a century ago, the sale has amazingly increased both at home and abroad. A trial is only needed to prove its superiority over other plate powders in use. Sold in Boxes at 1s. and 2s.; Tris, 6s. 6 Pont Street, Belgrave Square, and 48 Belgrave Road, London, S.W.

TO CHEMISTS AND MINERAL WATER MANUFACTURERS

PURE SPIRITS OF WINE

60 OVER PROOF. 19/6 PER GAL.

TERMS: NET, AND PROMPT CASH.

J. GIBB SMITH & CO., Oxford Road Distillery, MANCHESTER.

JONES & MASON, METHYLATED SPIRIT MAKERS.

Regent Wharf, Copperfield Road, Mile End, London, E.

FROM RATCLIFF.

SAMPLES AND PRICES UPON APPLICATION.

GENUINE OIL OF MUSTARD SEED

Is strongly recommended as a safe and effectual remedy in cases of Rheumatism, Gout, Rheumatic Gout, Sciatica, Lumbago, Headache, Pains in the Stomach, Spasms, Bruises, Chilblains, &c. *Retail in Bottles, 1s. each.*

Imported by J. H. & S. JOHNSON, Wholesale Druggists,
6, 8, & 10 WHITECHAPEL, AND 7 CHURCH STREET, LIVERPOOL.

PITCH,

OILS, TALLOW, &c.

J. R. PEACE & CO.,

26 ALEXANDRA BUILDINGS,

Estd. 41 Ormond Street, Liverpool, [1867.]

IMPORTERS OF AND MERCHANTS IN ALL KINDS OF PITCH, OILS, &c.

Hard and Soft Stearine Pitch	Hot Neck Grease	India Rubber Substitute
Cotton Seed and Patent	Turpentine & Rosin	Roll and Flour Sulphur,
Brown, Vegetable, & Wood	Soft Soap, Glue, &c.	Tallow, Cylinder Oils,
Stockholm and Archangel	Brimstone, Ashes, &c.	R. D. Petroleum Oils, and
Palm Oil and Rosin	Elastikon.	General Produce.

CORRESPONDENCE SOLICITED.

SAMPLES AND LOWEST PRICES ON APPLICATION.

SILVER MEDAL
I.H.E. 1884.



THE ONLY
MEDAL AWARDED
FOR THIS
SPECIALITY.

CHLORIDE OF LIME!

IN AIRTIGHT WATERPROOF
INVENTORS AND
MANUFACTURERS



& ODOURLESS PACKAGES
NATIONAL CHEMICAL CO., LONDON

THE N. C. COS. PACKAGES HAVE STOOD THE TEST FOR MANY YEARS, AND CAN
ALWAYS BE RELIED UPON TO GIVE SATISFACTION.

KEPT IN STOCK BY ALL WHOLESALE DRUGGISTS &c.

SEE THEIR PRICE LISTS.

SILVER MEDAL
I.H.E. 1884.



BEWARE
OF OTHER—SO
CALLED AIRTIGHT
PACKAGES.

TO MAKERS OF POLISH PASTE.

I recommend my "GENUINE BRILLANTINE"
Metallic Polish Powder, sole acknowledged and proofed material for making best Polish Paste.

It is used since years by the most important makers. Only Address:— [2]

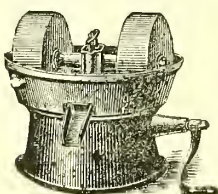
FRITZ SCHULZ, JUN., LEIPZIG, GERMANY.

FOLLOWS & BATE, LIMITED, ENGINEERS, MANCHESTER.

SPECIALTIES.

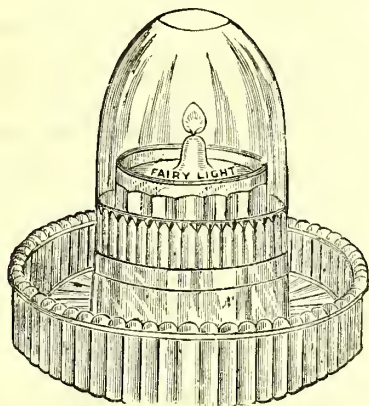
Drug Mills, Tincture Presses in Wood and Iron, Edge Runners, Mixing
Machines, Pan Mills, Paint and Colour Grinding Machines, &c.

PRICES AND PARTICULARS ON APPLICATION.



PATENT "FAIRY" LAMPS and "FAIRY" LIGHTS.—SAML. CLARKE, Patentee.

PRICES ON APPLICATION.



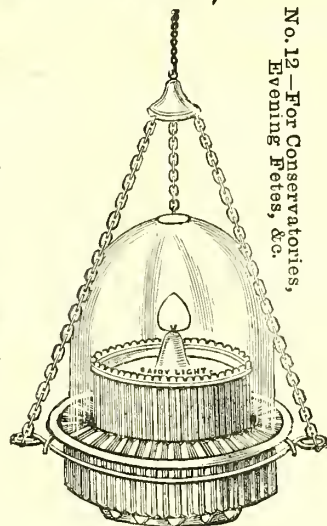
No. 17.—FLOWER CIRCLE.



"FAIRY" LIGHT.

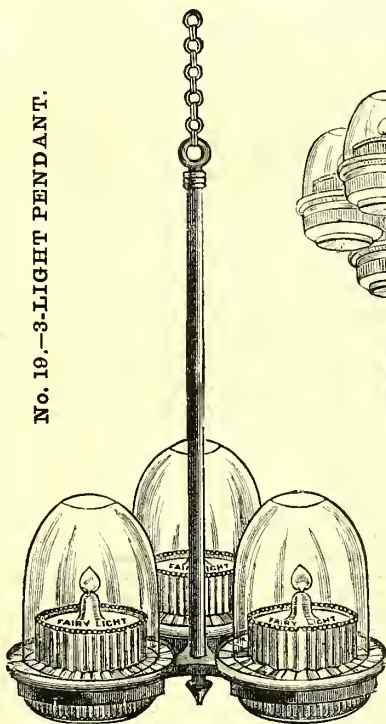


"FAIRY" GLASS.

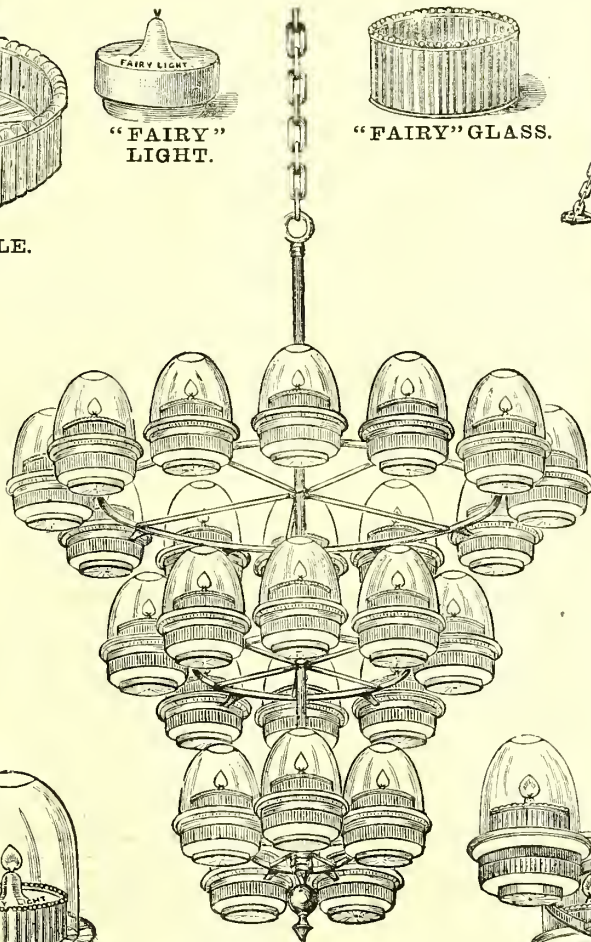
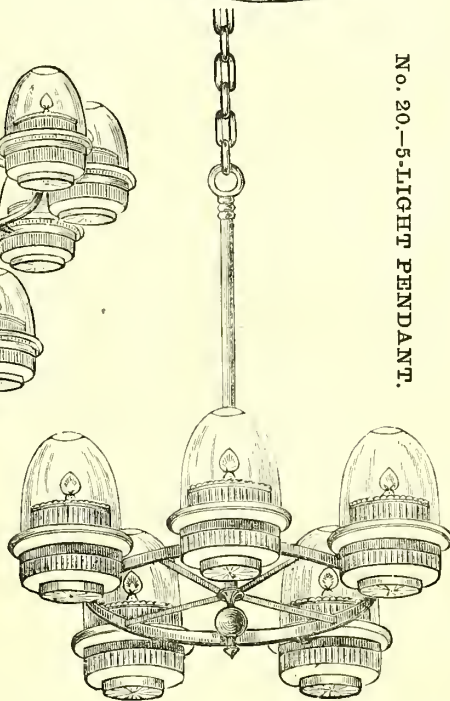


No. 12.—For Conservatories,
Evening Fetes, &c.

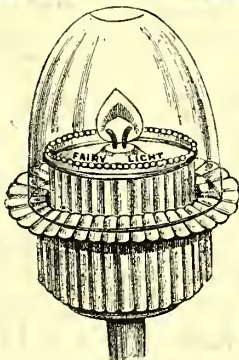
No. 19.—3-LIGHT PENDANT.



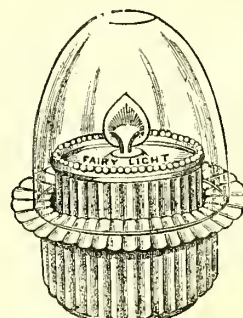
No. 20.—5-LIGHT PENDANT.



No. 22.
25-LIGHT CHANDELIER.



No. 14.



No. 13.

N.B. See that the
name "Saml. Clarke
Patent & Trade Mark
Fairy" is on every
Lamp.

Patented, and Trade Marks Registered, in Great Britain, France, Germany, Belgium, Austria, and the United States.

MANUFACTORY—CHILD'S HILL, LONDON N.W.

Show Room : 31 Ely Place, Holborn Viaduct, E.C. America : Pyramid & Fairy Light Manufactory, Newark, New Jersey.

HORN & SON

AUTHORISED AGENTS FOR PROCURING

PATENTS AND TRADE MARKS,SOMERSET CHAMBERS, 151 STRAND, LONDON
(NEXT TO SOMERSET HOUSE).

Guide to New Patent Law and Registration gratis.

**TRADE MARK PROTECTION
ASSOCIATION.**

2 LANCASTER PLACE, STRAND, LONDON.

Registration and other business connected with Trade Marks
in the United Kingdom and Foreign Countries and Colonies.**PURE PRECIPITATED CHALK.***Cheapest Sellers in the Market.*

Chemicals, Drugs, and Oils at lowest market rates.

APPLY TO

AUG. LEVERMORE & CO.,

8 LIME STREET, LONDON, E.C.

**PETROLEUM
JELLY,**

EQUAL TO AND CHEAPER THAN VASELINE.

SANITARY FLUID AND SHEEP DIP,
THE CHEAPEST AND BEST DISINFECTANT.

GREASE, PITCH, ASPHALTE, AND ALL PRODUCTS OF TAR AND ROSIN.

*Samples and Prices on application.***GRINDLEY & CO., POPLAR, LONDON, E.****ORANGE WINE**

(VIN. AURANT., P.B.)

Specially brewed for Quinine Wine, does not deposit. Is well adapted for Export,
as it will keep good in any climate. In casks, 13, 27, 56, 112, 140 gallons; small
casks 3s. 6d. per gallon, carriage allowed. In wine bottles (not less than 3 doz.), at
9s. per doz., including bottles. Cases extra and returnable.
*Sample six stamps. Special quotations to large buyers.***GEO. DURRANT & CO., Hertford.****COCA WINE.**Agents Wanted all over England, Scotland, Wales, and
the Colonies.**ARMBRECHT, NELSON & CO.,**

Temporary—

23 DUKE STREET, GROSVENOR SQUARE, LONDON, W.

POWELL & BARSTOW,5 Albion Place, Blackfriars Bridge, London, S.E.,
Late W. HURLSTONE & CO., Blackfriars Road and Vine Street, S.E.,

MANUFACTURERS TO THE WHOLESALE TRADE OF

ELASTIC GUM SURGICAL INSTRUMENTS.

WORKS, LAMBETH. ESTABLISHED 1830.

BELGRAVIA TOOTH-PASTE

(REGISTERED).

IN LARGE JARS, 1s. and 2s. 6d. EACH.

PREPARED ONLY BY

JOHN BEDDARD,

46 Churton St., Belgrave Road, London, S.W.

**H. SEEGER,**

21 MINCING LANE, LONDON, E.C.,

Sole Agent for

ADALBERT VOGT & CO.'S

"UNIVERSAL"

METAL CLEANING POMATUM,

Which is recognised by everybody to be the best.

CHLORODYNE (W.H.B.)

FOR HOSPITAL, DISPENSARY, AND SURGERY USE.

Perfectly miscible, soluble, and inseparable. It neither ferments, cakes up, nor
deposits, and being more limpid than other kinds, is more quickly and accurately
dispensed. Used for some years in the Corporation of the Poor Dispensary, Exeter,
by W. H. Bulley, Dispenser. It is by far the best and cheapest Chlorodyne made
for the profession and trade.N.B.—10 minims contain $\frac{1}{4}$ gr. Morph. Mur. The other active ingredients
are Chloroform, Ether, Tinct. Capsici, Ol. M. Pip. and Acid Hydrocy.; $\frac{1}{2}$ oz. cgs. free
for P.O.O. for 10/; $\frac{1}{2}$ ss. Sample Bottle free for six stamps.

Address—W. H. BULLEY, Chemist, EXETER

**TYPKE & KING,**

110 CANNON STREET, E.C.

Manufactories—MITCHAM & RAINHAM.

Pure Acids—Valerianic Acid and all Valerianates. Antimony Golden
Sulphuret, Antim. Crocus Lump, and Powder. Essences of Pear and
Pineapple. Potassium Cyanide. Nitrate of Ammonia, crystal and
granulated. Potass. Sulphid, Iron Perchloride, solid and solution.
Hypophosphites of Lime, Manganese, Soda, Potash, &c.ESTABLISHED
40 YEARS.]**JOHN HYNAM'S
PURIFIED FULLER'S EARTH**

FOR THE NURSERY AND TOILET.

Also in Powder and Kiln-dried Lumps for Manufacturing Purposes.

OFFICE—11 Wilson Street, Finsbury, London. Redhill, Surrey.
THE TRADE SUPPLIED.**"LA BRILLANTINE"**

METALLIC POWDER (REGISTERED)

Is the best, cheapest, and most effective Powder for cleaning and polishing Metals
and Glass (especially Brass). It is used by the Life, Horse, and Dragon Guards,
the Fire Brigades, &c., &c. Sold everywhere in 6d. and 1s. Boxes.Proprietors: **J. F. BAUMGARTNER & CO.,**

22 Newman Street, Oxford Street, LONDON, W.

W. KEMP & SON, HORNCASTLE, IMPORTERS OF ALL KINDS OF GENUINE BEESWAX & HONEY

Samples and Close (*carriage paid*) Quotations on application.
When enquiring please state quantity.

ANTOINE'S INK.

PARIS. GREENWICH.
SOLD BY ALL STATIONERS THROUGHOUT THE WORLD



BUTTER COLOURING & CHEESE RENNET.

AGENTS AND CORRESPONDENTS:
ALFRED CHOLLET, Saumur, France.
W. & N. BLANDOFF & Co., Moscow.
CANEPÀ & BIGHINI, Genoa.
VICTOR KORCELIUS, Abo.
HAGE, BLOM & Co., New York.
ALEX. BRANDES, Hamburg.
GILLES HOEN, Battice, Belgm.
A. MICHELET, Christiania.
KUYPERS & Co., Rotterdam.
DOBBIN, OGILVIE & Co., Cork.
WILL. ADAMSSON & Co., Melbourne.
MEYER & HENCKEL,
Manufacturers, COPENHAGEN (Denmark).
Agents for English Dairy Districts wanted.

PHILLIPS & COMPANY, Ltd., CHEMISTS, WINE AND GENERAL MERCHANTS, BOMBAY AND POONA, INDIA.

ESTAB. 1810.]

[ESTAB. 1810.

THOMAS HASSALL, BAY SALT MERCHANT, MANCHESTER.

Salt of every description packed to suit the Trade in Boxes, Jars, Bottles, Linen Bags, and Strong Prepared Paper Satchels.
Apply as above. Eleven Prize Medals Awarded.

NOTICE. HORMUSJEE, RUTTONJEE & CO.,

WHOLESALE AND EXPORT DRUGGISTS,
Manufacturing Chemists and General Merchants, Importers and Exporters of Indian and Persian Products, &c.,
No. 6 Borah Musjid Lane Fort, Bombay, India.
Are prepared to accept Agencies for new Specialities, Patent Medicines, Druggists' Sundries, Spirits, Perfumery, &c.
Inventors wishing to have their specialities introduced into India should apply to the above firm. We will be glad to give our best attention to their sale, provided we are entrusted with the sole agency. Correspondence solicited.

THEEROLENE SANITARY DISINFECTANT

AND FLUID SHEEP DIP.

NON-POISONOUS.

THE BEST AND MOST RELIABLE, AND THEREFORE THE CHEAPEST
ANTI-FRICTION GREASE, OILS, PAINTS, TAR, ROSIN, &c.
PITCH, in Boxes and Casks, from 1 lb. to 4 cwt.

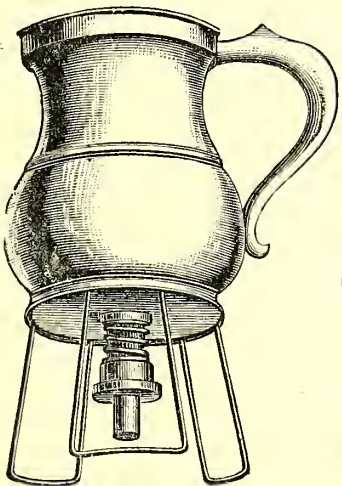
Prices and samples on application.

ELVIN BROTHERS, HULL.

TO LET.

HOW TO AVOID DAMAGE! DANGER!! DIRT!!! USE Maud's Patent Self-Acting Measure & Funnel.

So simple
in its
construction
it cannot
get out of
order.



It can be
washed
and
cleaned in
five
minutes.

By the use of the above simple apparatus not only is all waste and danger prevented, but where a number of Bottles require filling at one time, a very great saving of time and labour is effected.
Messrs. OLDFIELD, PATINSON & Co., Wholesale Chemists, Manchester, write to say that their hands can do nearly half as much more work in the same time as by the old funnel process. To those selling petroleum, or other offensive liquids, its use will prove a great boon, as there is no need to soil the hands in measuring. Made in Tin, Copper, Pewter, Glass, &c., at prices varying from 2/6 the pint measure.

PATENTEE AND MAKER,

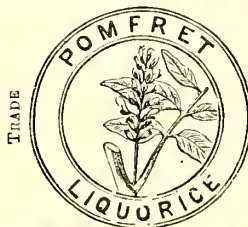
W. R. MAUD, PONTEFRAC, YORKSHIRE.

Particulars and prices on application.

PROFITABLE! SALEABLE! EFFICACIOUS!

THE GENUINE

Compound



Liquorice

WORM CAKES.

(Trade Mark and Title Registered.)

The above preparation for Children, made to sell at **One Penny** each, is the most perfect article of its kind offered. Children eat them with the greatest avidity, and their success is unfailing. Each cake is enclosed in a small parchment envelope, with full directions. Put up in neat Counter Boxes containing 3 dozen cakes each.

Price, 6/ per gross.

In quantities of 10 gross own name attached without extra charge.

Samples sent free on application.

MANUFACTURED BY

W. R. MAUD, Chemist, Pontefract, Yorkshire.

THE ONLY PERFECT ENEMA OBTAINABLE.

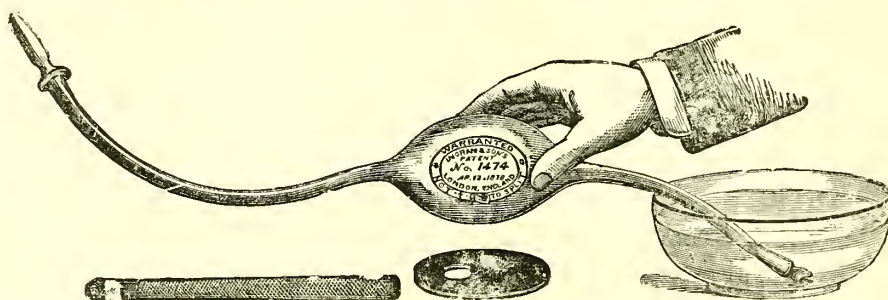
INGRAM'S IMPROVED HIGGINSON ENEMA AND SYRINGE APPARATUS

(BY ROYAL LETTERS PATENT).

Made without Seams or Ribs by our Patent Process of dipping in a solution of India Rubber, thus adding great strength and durability.

NONE GENUINE UNLESS STAMPED WITH NO. OF PATENT 1474.

CAUTION.—The only
Enema made without
Ribs.



All Imitations may be
detected by the Ribs on the
Surface, and are always
liable to split.

WARRANTED NOT TO SPLIT.

A.—Metal Pin Valve.

INGRAM'S IMPROVED PATENT SEAMLESS ENEMA is perfectly smooth on the surface, will not become hard or sticky, will not leak, and will not admit air while injecting or refilling. Specially prepared to resist the heat of tropical countries.

The great superiority of **INGRAM'S IMPROVED PATENT SEAMLESS ENEMA** over all others has given rise to **VARIOUS IMITATIONS**, and it has become imperative that the Patentees should, in order to **PREVENT DECEPTION**, explain the **PROCESS OF MANUFACTURE OF THEIR ENEMA** and the **MODE OF MANUFACTURE OF IMITATIONS** thereof, as they have **UNDENIABLE PROOF** that **INFERIOR ENEMAS** are positively **BEING SOLD** as their "**ADVERTISED**" **PATENT SEAMLESS ENEMA**.

INGRAM'S IMPROVED PATENT SEAMLESS ENEMA is made by a **NEW PATENT PROCESS**, viz. : By repeated dipping in a solution of India Rubber until the required substance is attained. This process adds greatly to its **STRENGTH AND DURABILITY**, and, at the same time, dispenses with **ALL SEAMS**, which, as is well known, are weak points in an Enema. This improved mode of manufacture (the result of long study and experience) enables the Patentees to produce a **PERFECT ENEMA WITHOUT SEAMS**, thus overcoming the great fault to be found in **ALL other Enemas**, viz. : **SPLITTING AND LEAKING**, which has always been a source of trouble.

INGRAM'S IMPROVED PATENT SEAMLESS ENEMA is fitted with **IMPROVED VALVES**, which prevent the admission of air with the fluid and **CAN** at any time **BE REPAIRED**, if necessary.

CAUTION.—Imitations of **INGRAM'S IMPROVED PATENT SEAMLESS ENEMA** are made of several pieces of Sheet India Rubber, which are cemented together and shaped in a mould, thus **PRODUCING RIBS ON THE SURFACE**, and **ENEMAS SO MANUFACTURED ARE ALWAYS LIABLE TO SPLIT AND LEAK AT THE SEAMS**, and thus to become quite useless.

INGRAM'S IMPROVED PATENT SEAMLESS ENEMA may be distinguished from **ALL IMITATIONS** by its **ENTIRE FREEDOM FROM RIBS OF ANY DESCRIPTION** on its surface, and by having an **IMPROVED METAL PIN VALVE** at the suction end **A** ; and it is acknowledged to be the **ONLY PERFECT ENEMA OBTAINABLE**.

Patented in England, No. 1474, April 12, 1878; in France, No. 126,909, October 11, 1878; and in America, No. 212,939, March 4, 1879.

To be obtained of all Surgical Instrument Makers, Druggists' Sundriesmen, Chemists and Druggists, in the three following qualities:—

No. 1a. Highly Polished, in Red, Green, Blue, Black, or White.

No. 1b. Unpolished, in Red, Green, Blue, Black, or White.

No. 2. Unpolished, in Drab only.

Favourably noticed in "*British Medical Journal*," December 13, 1879; in the "*Lancet*," January 8, 1880; and in "*British Medical Journal*," September 30, 1882.

HORSE, CATTLE, AND SHEEP MEDICINES.

BY ROYAL APPOINTMENT.



By Special Warrant,
Dated 27th December, 1865.

DAY, SON & HEWITT,

INVENTORS AND SOLE PROPRIETORS OF THE



By Special Warrant,
Dated 10th February, 1866.

"ORIGINAL" STOCK BREEDERS' MEDICINE CHESTS.

Containing the following Matchless Remedies for all Disorders in Horses, Cattle, Calves, Sheep, & Lambs:

THE CHEMICAL EXTRACT.

For assuaging pain and inflammation in all wounds, saddle galls, strains, bruises, and swellings in horses; for paining after calving and lambing, and for swollen udders and sore feet. $\frac{1}{2}$ -doz. box, 7s. 6d.

THE RED DRENCH

Celebrated for inflammatory disorders; such as fevers, pleurisy, foot-and-mouth complaint, yellows, surfeit, and red water. Also for difficult calving and lambing. 3s. 6d. and 13s. per dozen box.

THE GASEOUS FLUID.

Unmatched for colic or gripes and debility in horses, for colds, chills, shivering fits, and diarrhoea in cattle, calves, and sheep. 20s. per dozen box.

THE CARMINATIVE CHALK.

A warm stomachic in severe diarrhoea or flux, by way of change of the gaseous fluid in great irritation of the bowels. $\frac{1}{2}$ -dozen box, 10s.

Price of Chests, with "Guide to Farriery"—No. 1, £6/6/0; No. 2, £2/16/6; No. 4, £2/17/6 (for horses only). Carriage paid.

Prepared only by DAY, SON & HEWITT, 22 DORSET STREET, LONDON, W.,

And sold by all Wholesale Houses in London; Hood & Co., Melbourne; Felton, Grimwade & Co., Melbourne; Kempthorne, Prosser & Co., Dunedin and Auckland; Fairthorne & Co., Llancoaston; Dombain & Co., Christchurch; Jenoure & Co., Jamaica.

A LIBERAL DISCOUNT TO EXPORTERS, AND ALL PARTICULARS ON APPLICATION.



BY SPECIAL
APPOINTMENT.

SPRATTS PATENT MEAT "FIBRINE" VEGETABLE DOG CAKES (WITH BEETROOT).



BY SPECIAL
APPOINTMENT.

DOG MEDICINES for the Cure of Distemper, Worms, Mange, Eczema, Ear Canker, Rheumatism, and the various other Canine Diseases. Full List and Pamphlet on Canine Diseases, post free.

"COMMON SENSE OF DOG DOCTORING," price 6d.

DOG SOAP.

LOCURIUM. Price 6d. and 2s. per Bottle, retail. A Patent Vegetable Oil, curing Sore Feet in Dogs, Cracked Heels, Broken Knees, or Sore Backs in Horses; and Sores, Bites, and Wounds of all kinds either in man or beast. Small Pamphlets on Canine Diseases supplied free for distribution.

WHOLESALE
TERMS OF

SPRATTS PATENT LIMITED, LONDON, S.E.,

OR YOUR WHOLESALE
HOUSE.

The True Origin of the Old Rhyme.



Where are you going to My Pretty Maid?
I'm going a milking, Sir she said.
Are your CATTLE all healthy my Pretty Maid?
They are, thanks to DAY & SONS, Sir she said.

Awarded 26 Prize Medals.

USED EVERYWHERE FOR NEARLY 50 YEARS.

DAY & SONS'

WORLD-FAMED

HORSE & CATTLE MEDICINES.

DAY & SONS' "PURIFIED DRIFFIELD OILS" (commonly called by Farmers "Days' Black Oils") for Wounds and Injuries of all kinds in all animals; anointing in difficult Lambing and Calving, &c. Price 2/6 per bottle.
DAY & SONS' "BLACK DRINK," the renowned remedy for Colic or Gripes in Horses, Scour, Diarrhoea, Debility, &c., in all stock. Price 1/8 per bottle, or 19/- per dozen.
DAY & SONS' "RED DRINK," unequalled for Cleansing after Calving, and all Feverish or Inflammatory Disorders in Cattle. Price 12/- per dozen.
DAY & SONS' "WHITE OILS," for all External Injuries, Sprains, Swellings, Rheumatism, &c. Price 2/6 per bottle.
DAY & SONS' "ALTERATIVE POWDERS," for Horses. Price 3/6 per Canister containing one dozen.

INVENTORS AND SOLE PROPRIETORS OF THE "ORIGINAL"
UNIVERSAL MEDICINE CHEST, PRICE £2 4s., carriage paid.

which contains above five, together with four other, matchless medicines, and easy guide,

Beware of Imitations and note our ONLY Address—

DAY & SONS, CREWE, Cheshire.
WHOLESALE AGENTS: Messrs. Burgoyne, Burbridges & Co.; Sanger & Sons; Evans, Lescher & Webb, London; Messrs. Evans, Sons & Co., Liverpool, &c., &c.

ESTABLISHED 1810.

H. BROOKS, PEEL & CO., COLLAPSIBLE TUBE MANUFACTURERS

PATENTEES AND SOLE MANUFACTURERS OF THE

PORTABLE METAL SPRINKLER STOPPER,

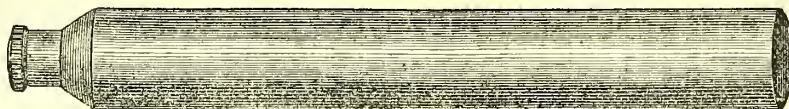
AND DEALERS IN

GLASS BOTTLES FOR PERFUMERS AND OTHERS.

STEAM FACTORIES:

31 Lime St., Camden Rd. (Offices), and Bartholomew Rd., Kentish Town, London, N.W.

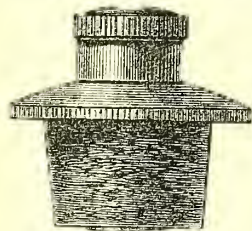
COLLAPSIBLE TUBES OF ALL SIZES.



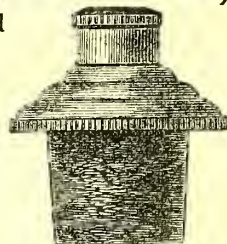
For Perfumes, Artists' Colours, Soaps, Cosmetics, Creams, Oils, Varnishes, &c. These Tubes are inexpensive and portable, and may be applied to many useful purposes besides those above mentioned.

SOLE MANUFACTURERS AND PATENTEES OF

THE PORTABLE METAL SPRINKLER STOPPER,



With Cork fitted thereon for bottles of any size, and having apertures of various dimensions, especially adapted for Perfumes, Hair Washes, Lime and Glycerine Essences, &c. These handsome stoppers give a character and finish to the most ordinary bottles to which they may be applied. Gilt or plain; and put up if required in handsome glass lid boxes, suitable for shop counters and show cases, at moderate prices.



No. 18a.

THE "TORSION" PATENT SPRINKLER.

The two designs, Nos. 18a and 19a, are those to which we direct special attention, as sizes being in general use; other sizes will follow promptly to meet all requirements, on which Caps with two or more holes will be introduced to meet the public taste. Particular attention is called to the latest improvement in our Patent Metallic Stopper, the "Torsion."

This New Stopper adheres to the design of the original patent, which has been universally acknowledged as an ornamental and inexpensive article for the Toilette, as possessing all the advantages of a "Permanent and Indestructible Stopper, suitable for Bottles of all Sizes and Shapes," with the additional security it affords, that the Cap can never be entirely unscrewed, consequently it cannot be lost. It is specially effective as a Sprinkler, while giving a more prompt and copious, yet economic, supply, through the improved action of the Cap. Such combined advantages, in an article of exquisite finish, have long been desired, and it is thus submitted for general approval, and its usefulness when tried will be appreciated by all.

Illustrations, Price Lists, &c., can be had on application, or through any Wholesale House in town or country. All Orders received direct will be promptly attended to.



No. 19a.

CAUTION.—All Stoppers of our Manufacture are made of Pure Tin, and have the name of H. BROOKS & CO. stamped on the under side of the rim.

All Tubes are made of Pure Tin unless specially ordered of Mixed Metal, from the smallest size up to 13 in. by 2½.

A copy of this Supplement is inserted in every number issued of "THE CHEMIST AND DRUGGIST."

SPECIAL EXTRA SUPPLEMENT.
NOV. 27,
1886.

**BUSINESSES WANTED.
BUSINESSES FOR SALE.
PREMISES TO LET.**

**AUCTION SALES
EXCHANGE COLUMN**

**PARTNERSHIPS.
SITUATIONS WANTED.
SITUATIONS VACANT.**

Advertisements for this Supplement must be prepaid, and can be received at the Office, 42 Cannon Street, until 5 p.m. on Thursday afternoon, or by first post on Friday morning of each week.

Remittances payable to EDWARD HALSE, crossed MARTIN & CO. Stamps are taken in payment.

The Terms for Advertisements in this Supplement will be found printed under each heading.

OFFICE: 42 CANNON STREET, LONDON, E.C.

The VALUE of "THE CHEMIST & DRUGGIST."

TESTIMONY BY ADVERTISERS.

We have recently received many expressions of satisfaction from Advertisers, and amongst them is the following note:—

I am most gratified with the results of my advertising in your paper. I consider it by far the better journal for business than any other published. Facts speak for themselves. I find THE CHEMIST AND DRUGGIST mentioned ten times where other of our Trade Journals are once. I cannot allow this opportunity to pass without thanking you for the unremitting attention you have always shown. I must confess I had grave misgivings concerning your alteration from monthly to weekly publication; but, instead of fears, they are a pleasurable knowledge that business has increased wonderfully. (32/22.)

CHEMISTS' TRANSFERS.

MESSRS. ORRIDGE & CO., 32 LUDGATE HILL, E.C.,
CHEMISTS' TRANSFER AGENTS,

May be consulted at their Offices on matters of SALE, PURCHASE, and VALUATION. Immediate attention given to Foreign Commissions. Terms for Valuation on application. N.B.—No CHARGE TO PURCHASERS.

Messrs. W. H. TAYLOR & CO.,
79 Queen Street, London, E.C.,

Have the following Businesses for transfer:—

LONDON, N.E.—A very profitable Dispensing, Prescribing, and Light Retail Business; returns about £500; net profits about £300; shop very conveniently fitted; good house, lease 19 years, rent £65; established 6 years; vendor, who is 70 years of age, retiring.

LONDON, W.—£75 will purchase a handsomely-fitted and well-stocked Pharmacy, in leading thoroughfare; returns by manager £7 per week, has done much more, and will again with personal attention. This is an unusual opportunity.

HOME COUNTIES, within one hour from London.—A rapidly improving Business, recently established; now returning about £9 per week, will soon do £20; very handsome shop; good house; satisfactory reasons for selling; valuation of stock and fixtures will be accepted.

N.B.—Our printed Register of Businesses for Sale will shortly be ready.

TO LET.

3s. 6d. for fifty words; 6d. for every 10 words beyond

TO BE LET.—Corner of Albion Road, Wandsworth Road, near the Chatham and Dover Station, very eligible new premises, well adapted for a first-class Chemist; no opposition; good neighbourhood; rent low. For particulars apply on the premises, or to Mr. Green, 18 Lansdown Gardens, South Lambeth. No agents.

SHEFFIELD.—The old-established Chemist and Druggist's Shop to be Let in St. Thomas Street and Broad Lane; immediate possession can be had; good reasons given for tenant leaving; turnover about £600, could be considerably increased; fixtures £25. Apply, J. P. Sharman, Accountant, 4 Orchard Street, Sheffield.

BUSINESS WANTED.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

CHEMISTS' BUSINESS, Small, wanted to purchase; Prescribing preferred; in London or large town. Address with full particulars, in confidence, "Medicus," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, London.

BUSINESSES FOR DISPOSAL.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

FOR IMMEDIATE SALE, in Eastern suburbs of London, on account of the death of the proprietor, two small Businesses; price £400 and £250 respectively, or for the two £600 for a cash purchaser. Apply, D. & S., care of Wright, Layman & Umney, Southwark, London.

YORKSHIRE.—In medium-sized town, a thoroughly genuine Light Retail and Prescribing, with good specialities; returning over £700; profit £240; fair house and good shop, nicely fitted; rent £30; price about £600. F. J. Brett, Valuer, Leicester.

TO BE SOLD (at Owston Ferry, Lincolnshire).—House, Shop, and Trade Fixtures thereto belonging, in connection with which a very successful Drug and Grocery Business has been carried on many years, will be offered for Sale by Auction on December 15; or, in the meantime, the business, including stock-in-trade, may be negotiated for. For particulars, apply to Mr. Sharp, Solicitor, Epworth, near Doncaster.

EASTERN COUNTY (market town).—A strictly reliable Mixed Retail, Dispensing, and Prescribing Business; in consequence of failing health of owner; returns nearly £2,500; very profitable; same hands 18 years; convenient house, warehouses; only £1,100. Also Partnership in Wholesale and Retail Business; same hands 30 years; half share £2,000. Apply, Messrs. Berdoe & Co., 30 Jewry Street, Aldgate, City.

IMMEDIATELY, a light Retail and Prescribing Business, in a rising neighbourhood; satisfactory reasons for leaving; good patent proprietary articles. Address, J. Kennewell, Esq., 1 Chelmsford Terrace, Willesden Green, London.

NORTH LONDON.—An old-established Retail and Dispensing Business; returning between £400 and £500 per annum under management; main and improving thoroughfare; lease about 12 years at £70. Apply, "Chemist," care of Mr. Aldridge, 1 Albert Villas, Bounds Green Road, N.

DISPENSING and Light Retail, for immediate disposal on easy terms; large shop, well fitted; good house, 8 rooms, bath, w.c.; capital position, in rapidly increasing district; exceptional opportunity for active man with small capital; cash £100, balance by arrangement. Apply, J. H. Walker, Seacombe, Cheshire.

A BARGAIN.—For immediate disposal, owner having entered the medical profession, one of the best Businesses in the Rhondda Valley, and successfully carried on for 12 years; valuable colliery and medical connection to be transferred; the whole upon favourable terms; population 12,000. Apply, with references, Jones, Pharmaceutical Chemist, Treherbert, Glamorganshire.

EMPLOYERS WANTING ASSISTANTS.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

All Advertisements should reach the Office, 42 Cannon Street, by 5 p.m. on Thursday afternoon, or first post on Friday morning of each week.

BRUSSELS.—An experienced Assistant, speaking French, well up in Dispensing and Prescribing; out of doors; salary. Apply, in the first instance by letter, to Allen & Hanburys; or to Monsieur Ch. Delacre, Pharmacien, Brussels.

STORE TRADE.—For about December 30th; outdoor; a Junior Assistant, about 22, for sale counter, desiring a permanency; must be active, industrious, rapid in serving, and well recommended by last employer. Apply, stating age, height, salary, experience, and enclose *carte*, Wand's Drug Store, Haymarket, Leicester.

SOUTH AFRICA.—An Assistant, not over 25, holding Minor qualification; first-class passage out and furnished rooms for three years; first year £120, second year £140, third year £160. Apply by letter to L. G. B., 11 Edmund Place, Aldersgate Street, London, E.C.

ASSISTANT, as Senior; about 24; Minor qualification; a permanency; must have had good experience in Dispensing, Practical Pharmacy, and Specialities; junior and apprentice kept. Personally, F. W. Warren, 8 Neeld Terrace, Harrow Road, London, W.

TO PUPILS OR IMPROVERS.—A Surgeon in large iron-works and colliery practice has a vacancy for above; every assistance given in all the details of the profession; a comfortable home to a gentleman who can fall in with a happy domestic circle; premium moderate. Address, Dr. Evans, Beaufort, Breconshire.

AN ASSISTANT (about 23 years of age); well up to the duties of a good country business. State age, height, and salary, &c., to C. Gascoigne, Pharmaceutical Chemist, Kidderminster.

SOUTH AFRICA.—Wanted, a Young Man (single) as Assistant; good prospects for one who is energetic, hardworking, and sober, and who has good practical knowledge of a Chemist's business; legal qualification not necessary; salary, £150 first year, with yearly advance; passage out to be paid at end of three years' service. Candidates who hold undeniable references, apply, with photo, to D., care of Messrs. Evans, Lescher & Webb, 60 Bartholomew Close, E.C.

WANTED, a competent and trustworthy Assistant; must have had experience in a good dispensing business; one only kept; liberal salary to a suitable gentleman. Apply, giving reference and usual particulars, to J. S. Burnell, Chemist, Glossop Road, Sheffield.

WANTED, by December 15, a competent Assistant for Dispensing and Retail business, indoor; must be unmarried, and able to take entire charge during the principal's absence. Send particulars and photograph to S. J. Coley, Chemist, Stroud.

ASSISTANTS WANTING SITUATIONS.

1s. for twelve words; 6d. for every six words beyond.

MANAGER OF BRANCH or Senior; aged 33; disengaged; abstainer; varied experience; excellent references; Northern counties preferred. Orton, 29 White's View, Manningham, Bradford, Yorkshire.

A GENTLEMAN (in 21st year), for 2 years assistant to Prof. J. Carter-Bell, of Manchester, and nearly 4 years to Prof. A. H. Allen, of Sheffield, is anxious to enter the manufacturing department of a Wholesale Drug House as Chemist, with prospects; would give a year's services free. Apply, "M.S.C.I.," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

ASSISTANT (or Dispenser to Surgeon); 9 years' experience; aged 25; good recommendations; state salary. A. C., Ripley Hall, Bournemouth.

A JUNIOR; aged 20; 2 years' experience. D. A. Thomas, Cwrtbrynbeidd, Llandilofawr, Carmarthenshire.

A ASSISTANT; temporary or permanent; not qualified; Mixed Retail, energetic and pushing salesman; good references; abstainer; aged 37; height 5 feet 8 inches single. "Hydrarg," 12 Chapel Street, Uxbridge, Middlesex.

JUNIOR; nearly 5 years' good London experience, partly West-End; Retail and Dispensing; height 5 ft. 10 in. F. Thomas, 199 King's Road, S.W.

MISCELLANEOUS.

Special charges are made for Advertisements under this heading, which can be obtained on application.

TO COLONIAL DRUG & CHEMICAL FIRMS.

ADVERTISER, practical and experienced, with a thorough knowledge of Home and Continental Markets, is open to Buy on Commission for a good house. Address, C. A. P. Green, Care of THE CHEMIST AND DRUGGIST, 42 Cannon Street, London, E.C.

A MOST VALUABLE AGENCY.—One Agent wanted in every town and village (where not already appointed) for Birley's preparations of Free Phosphorus; established 50 years; prescribed by medical men of first standing; unstinted supply of 40-page pamphlets, showcards, &c. Price-list and terms of agency, Gordon Murray & Co., 17 Castle Street, Holborn, London.

PRINTING CONTRACTS for Large Numbers of Letterpress Work are undertaken by William Walker & Sons, Victoria Works, Otley, Yorks; estimates given and inquiries invited; special facilities for the rapid production of Almanacs, Cheap Literature, Handbills, &c.

BOXES—LIGHT WOOD BOXES.—Boxes suitable for Chemists, for sending Bottles and all kinds of articles through the Post; strong Boxes made for Packing all kinds of articles; samples post free six stamps. Write for sample, giving size you require, stating whether hinged or sliding-lid boxes are wanted, to T. Casbon, Box Maker, Millfield Works, Peterboro'.

PRELIMINARY AND MINOR.

ALL STUDENTS who are preparing should send for particulars of a method of study which will enable them to pass with ease. Enclose stamped envelope to Mr. J. Tully (Hills Prizeman), Chemist, Hastings. Established 1872. References to past and present Pupils. 32 Pupils passed the last Examinations.

MAJOR AND MINOR, ILLUSTRATED.

FASCIMILE of the future Certificate of THE CHEMIST AND DRUGGIST (cum Curriculo at the first Schacht); vide CHEMIST AND DRUGGIST, November 6, page 604; above sent post free on receipt of stamps value 7d. "Major," 67 Romilly Road, Finsbury Park, N.

WARREN'S SWEET ESSENCE OF RENNET.

The Original Recipe to be Disposed of, with Inventor's Guarantee and Process.

This esteemed and elegant preparation can now be made and vended by any purchaser of the Recipe and Process, which is not protected or patented; no outlay necessary; profits considerable.

For further particulars, address, "Rennet," care of J. MACKEY, Advertising Contractor, 155 Fenchurch Street, London, E.C.

IMPORTANT NOTICE.

ANY WHOLESALE OR RETAIL CHEMIST who publishes a Monthly or Annual List of Prices for the use of the General Public (not the Trade), or Pocket Almanack, will oblige Messrs. A. ROWLAND & SONS, of 20 Hatton Garden, London, by sending them a copy of the last issue, and stating price of Advertisement to occupy page or half-page, facing matter or on outside back cover. Counter Bills can always be had

ON APPLICATION.

TELEGRAPHIC ADDRESS: "Chemicus London."

TELEPHONE No. 1852.

EXCHANGE COLUMN.

TERMS.

Advertisements in this department must be paid for in advance. From this rule no deviation can be made. Insertions are charged at the rate of 4d. per word, provided the advertiser attaches his name and address, for each word of which he must also pay at the same rate; or, if he pays 1d. per word, his name and address will be registered and a figure attached to his advertisement. All correspondence referring to that figure must be addressed to The Publisher of the CHEMIST AND DRUGGIST, 42 Cannon Street, E.C., and the figure must be distinctly endorsed upon the envelope. Letters will then be forwarded to their proper destination. A price is counted as one word, as e.g., £1. 10s. 6d.

NOTICE.—In future no Advertisement will be inserted in this section for less than Sixpence. Minimum price for any announcement, 6d.

DEPOSIT OF MONEY.—In order to ensure safety we offer the following system:—The purchaser of anything advertised in the Exchange Column may remit the amount to us. We acknowledge receipt to both parties by post cards, and only pay the money deposited on the advice of the remitter. Whether returned to him or paid to the seller, we charge a commission of 6d. on any transaction of £3 or less, or 1s. if above that amount.

Remittances payable to EDWARD HALSE, at the G.P.O., London, and crossed MARTIN & Co.

FOR DISPOSAL.

NOTICE.—In future no Advertisement will be inserted in this section for less than Sixpence. Minimum price for any announcement, 6d.

Drugs and Chemicals.

glycerine, vermicelli, senna, finest cod-liver oil, castor oil; under value. Gifford, Blackburn.

Proprietary Articles.

few patents, cheap; send for list. 76/20.
few patents, including Beecham's, Whelp-ton's, &c; send for list. 76/21.

Soda-water Machinery.

For sale cheap, or exchange, a six-bottle Macdonnell's filling-machine, with all extra parts complete, for bottling aerated waters; can be seen at work at any time. Carter & Co., Soda-water Works, Bristol.

Educational.

The "Year-book of Pharmacy," complete numbers from 1873 to 1885 inclusive; what offers? 76/9.
Botany.—The indigenous official plants of the 1885 Pharmacopoeia, mounted on cardboards, only 7s. 6d., free. Higginson, Newferry, Birkenhead.

Will's "Materia Medica," and Garrod's, each, 4s.; "Elements of Pharmacy," 3s. 6d.; Lindley's "Botany," 2s.; Griffiths' "Chemical Recreations," 2s. L., 102 High Street, Kingsland, E.

Begbie's "Medical Information and Advice," 1s. 6d.; Tanner's "Practice of Medicine," 6th edition, 2 vols., 13s.; both in excellent condition. Hebbethwaite, Chemist, Drypool, Hull.

"Operative Surgery" (Liston) published 22s.; "Elements Surgery" (Liston), published 25s.; White's "Farriery," 3 vols., illustrations, published 20s.; two Botanical works, illustrated, published 16s.; 20s. or exchange. Jackson, Chemist, St. Helens.

Garrod's "Materia Medica," new, 8s. 6d.; Squire's "Companion," 1877, undamaged, 4s.; Aitken's "Medicine," 1863, good condition, 6s., pub. 28s.; Bentley's "Botany," 1870, 4s.; Fowne's "Chemistry," 1863, 3s. 6d.; Waring's "Therapeutics," 1871, 5s. Throssell, Cambridge.

Arnott's "Physics"; Squire's, 12th edition; Oliver's "Botany"; "Year-book Pharmacy," 1874-7; Bright's "English History," vol. 2; White's ditto; Giles' "Translations—Casar, Virgil, Cicero"; Mason's, Cornwell's English Grammars. Offers. Jones, Treherbert.

Squire's "Companion to British Pharmacopoeia," capital condition, 5s.; Johnson's "Midwifery," 3s. 6d.; London Pharmacopoeia, 1840, 1s. 6d.; Thomas's "Practice of Physic" (treats of all diseases), 2 vols., 6s.; Cooper's Surgical Dictionary, 1,200 pages, scarce, 1s. 6d.; Denman's "Midwifery," 2s. 6d.; Reguault's "Elements de Chimie," 1s.; "Management of Poultry," 6d.; Watson's "Practice of Physic," 2nd vol., 850 pages, 1s. 6d.; B.P., 1864, pages uncut, 2s.; Howship's "Surgical Diseases," 1s. 6d.; Ainsworth's Anglo-Latin Dictionary, 1s. 6d.; "Domestic Homoeopathy" (published at 5s.), 1s.; Beasley's "Druggist's Receipt Book," 2s.; Meadow's French and English Dictionary, new, 2s. 6d. Keeley, 39 Fairfax Road, N.W.

Formulae.

Set 12 recipes—gonorrhoea, gleet, syphilis, secondaries, and every phase of venereal disease, with concise instructions. J. Johnson, 64 Furness Hill, Sheffield.

Please note this!!!—Seasonable proprietaries, make your own from Brooks's Formulae, warranted elegant and excellent—"Influenza Mixture," acts like magic, pleasant and safe; "Glycerine Cream" (like Beetham's), rapidly cures chapped hands, frost-bites, &c., rendering skin like velvet; "Hop Tonic," better than any other, can be made instantly, costs 1s. lb.; "Canadian Cone," certain cure for chilblains, sweet and cleanly; "Bronchelixir," rapidly gives relief in bronchitis and chest affections, wonderful remedy; "Glycerine Linctus," gives instant ease, and cures rapidly, pleasant taste, good proprietary; "The Jubilee Sauce," universally liked, most luscious, renders cold meat a luxury, differs from any other, costs under 6d. a pint; recipes 1s. 1d. each, 3 for 2s. 6d. Special offer. Cut this out and above will be sent (as sample) for 5s.; list free. Tom Brooks, Chemist, Louth.

Shop Fittings.

Chemist's shop fittings, an entire lot, nearly new, suitable for shop 15 feet by 12 feet; mahogany drawers, with glass knobs and gold labels; dispensing-screen, with mirror back and marble slab; 4 cases, window enclosure, bottles, &c.; the whole for 50*l.*, cost over 100*l.* W. Widowson, Sherwood Street, Nottingham.

Second-hand Fittings.—3 ranges drug drawers, 1 lot cornice and shelving, 3 Spanish mahogany counters, 2 mahogany ditto, 3 mahogany - top ditto, 3 counter-cases, 6 upright counter - cases, cigar - case, desk, 2 wall glass cases, 3 window enclosures, shop - front sash, 1 pair mahogany chairs, 2 chandeliers, 2 pendants, 5 specie jars, 12 carboys, drug scales, 15 doz. rounds and pots, 30 doz. labelled ditto; a set of surgery fittings, drawers, shelving, counter, bottles, pots, and contents. W. Hawke & Son, Wild Court, London, W.C.

Miscellaneous.

Retail chemist, constantly employing man distributing bills, invites co-operation; careful delivery guaranteed; Glamorganshire. 75/38.

Chemists and Others.—Marble mortar, with lignum-vitæ pestle, 18 in. by 36 in.; price 30s. 33 Park Street, Islington.

4-gall. carboy; No. 8/9, or 10 wedgwood mortar; scales to weigh 1 cwt.; Squire's "Companion," 1885. Flemons, Dunstable.

12 gross turned wood boxes for 12 pills, 1s. gross; half-pint shop rounds, 3s. 6d. dozen. Smith, Chemist, Ludlow.

H. G. ol. menth. pip., original bottle, 16s. per lb.; marble mortar, 16 in. 10s.; large bell-metal mortar, at 6d. per lb. Floyd, Bury St. Edmunds.

Sixteen guinea hammerless choke-bore breech-loader, 12 gauge, perfect condition; price 8*l.* Halford, Chemist, New John Street West, Birmingham.

Five-grain pill-machine (24), capital condition, 7s. 6d.; electroplated cruet and pickle frame combined, cut-glass bottles, best nickel frame, heavily plated, 16s. Halford, Chemist, New John Street West, Birmingham.

Lychnophylax (Field's patent), offers requested for 16, plain and fancy, with 22 savealls and several parers; also about 60 lbs. very fine new English honey, in 1-lb. and 2-lb. glass jars. Carlton, Horncastle.

Binoocular microscope, by Smith & Beck, with several object glasses, eye-pieces, and other valuable accessories; original cost 24*l.*; all in perfect condition, in mahogany case; price 12*l.* 10s. May be seen at Hinton's, Chemist, 38 Bedford Street, Strand, W.C.

To Surgeons.—Offers requested for the following, all in good condition:—Case extraction forceps; pocket case minor operations; abscess lancets; 6 silver-plated catheters, case; miniature dispensary; brass enema, case; urine tester; injector syringe; accouchment bag, instruments, various drugs; bag tourniquet bandages; 3 sets splints, arms, legs; ointments; pocket case, three bottles; amputation case; drugs, bottles, pots; 27 medical volumes. Harwood, St. Columb.

WANTED.

Syphons, cheap; also 2-grain pill-machine. 76/2.

Two-drachm pessary moulds and 15-grain suppository moulds, in good condition. 73/30.

A large stone mortar, with long-handle pestle, 4 or 6 gall. capacity, sound. 75/41.

One-gall. tincture-press. Treharne & Duck, Cardiff.

5-lb. tins vascline, carriage paid. Eastman, Chemist, Tottenham, N.

Literary matter of Diary, 1877. Pearson, 101 Eastgate Street, Chester.

Shop rounds and ointment jars, cheap. Gifford, Chemist, Blackburn.

Dental engine, Shaw's or White's, lathe head vulcaniser; Tome's "Dental Surgery." C. D., 28 Earl Street, Stafford.

A double-action tincture-press, as Lynch's; address lowest cash price. Alfred King & Co., Hop Bitters Depot, Croydon.

Latest editions of Squire, Beasley, Quain's Dictionary, or similar work. Doubleday, Dorking.

A platinum vessel, capacity not less than 1 gall. Apply, stating exact size, dimensions, &c., to 75/39.

Three strong 20-gallon galvanised-iron cisterns, suitable for boiled and linseed oils and turpentine. Cantrell, Chemist, Morley, Leeds.

Scales for packing-room, 2 lbs. down; suppository and pessary mould; evaporating dish. Hagon, Chemist, Cardiff.

Complete copies of *The Chemist and Druggist* (Oct. 16); full price (4d.) given; affix label on wrapper. 20/40.

Old gold, silver, and dental metals; highest value given in cash, or good mechanical work. Entwisle Brothers, 39 Shaw Street, Liverpool.

Modern dispensing counter; 6 feet; attractive front; lettered; silvered glass centre; shelves and drawers at back; first-class condition and cheap; send sketch. Tritton, Chemist, Tiverton.

Fittings, cornice, window-stands, dispensing-screen, soda-water stand, counter-cases, recess-labelled bottles, ointment and pill pots, also nitrous-oxide gas apparatus complete. M., 120 St. Annswell Road, Nottingham.

Address Wanted.

Can any reader furnish the address of C. Pembo & Co., late of Mansion House Chambers and Wardrobe Chambers, London, F.C.

THE CHEMIST & DRUGGIST.

JOURNAL OF THE TRADE. WEEKLY.

PUBLISHED EVERY SATURDAY, AT THE OFFICES, 42 CANNON STREET, LONDON, E.C.

BRANCH OFFICES:

AUSTRALIA—Normanby Chambers, Melbourne.

UNITED STATES—41 Temple Court, New York.